Impact of Accounting Information Systems, Work Motivation, and Internal Controls on Employee Performance: A Study at PT. Bank Danamon, Ambon Branch

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Abstract: This study aimed to evaluate the influence of accounting information systems (AIS), employee intrinsic motivation, and internal controls on the productivity of employees at PT. Bank Danamon's Ambon Branch. Primary data collection was conducted through meticulously designed questionnaires, ensuring validity and reliability. Respondents were carefully selected to align with specific criteria pertinent to the research objectives. Complementing the primary data, an extensive literature review was conducted to gather secondary data. Additionally, structured interviews were employed to acquire in-depth insights into the examined factors, bolstering the data's integrity and the study's overall validity. The analytical approach adopted was multiple regression analysis. The findings revealed that each variable—AIS, work motivation, and internal controls—individually exerted a significant influence on employee performance. The variable of AIS, as determined through partial testing, demonstrated a notable impact on performance metrics. Concurrently, the motivation variable, also assessed through partial testing, was found to significantly shape employee performance. Moreover, the study highlighted the pivotal role of internal controls in influencing performance outcomes. A simultaneous assessment of these variables revealed a profound collective impact on employee performance, with a statistical significance level notably low ($p < 0.05$). The coefficient of determination (R^2) was found to be 0.965, elucidating the substantial combined effect of the AIS, motivation, and internal control on employee performance. These insights contribute valuable knowledge to the banking industry, specifically in the realms of financial performance and organizational efficiency.

Keywords: Accounting Information Systems (AIS); Banking industry; Multiple regression analysis; Internal control; Employee performance

1. Introduction

The exploration of factors influencing employee performance within organizations has garnered substantial interest, particularly at PT. Bank Danamon Ambon Branch. Key factors identified as influential in this context include the AIS, work motivation, and internal control.

The role of AIS in providing accurate and timely financial data, as essential to informed decision-making by employees, has been underscored (Al-Dalabih, 2018). These systems are not only instrumental in enhancing employee efficiency and effectiveness but are also pivotal in daily task management, as evidenced by Aulia et al. (2022).

Furthermore, the impact of work motivation on employee performance has been recognized both locally and globally (Jayaweera, 2015; Prakoso, 2016; Safitri, 2017a). Motivation, originating from either intrinsic satisfaction or external stimuli like promotions and bonuses, is vital. It has been noted that organizations significantly contribute to fostering motivation through various means, including recognition programs, career development opportunities, and cultivating a positive work environment.

The significance of internal control in ensuring the accuracy of financial information cannot be overstated (Kania & Tanjung, 2021; Afrilia, 2018). Policies, procedures, and systems implemented under internal control are

aimed at mitigating fraud, errors, and resource mismanagement. These measures directly influence the reliability of financial information, thereby affecting decision-making and overall organizational performance.

Collectively, these factors – the AIS, work motivation, and internal control – exert a considerable influence on employee performance at PT. Bank Danamon Ambon Branch. The efficacy of AIS in providing necessary financial data for task efficiency (Elsharif, 2018; Damayanti, 2018), the role of work motivation in driving organizational success (Nurdiansyah et al., 2020), and the importance of internal control in promoting efficiency, accuracy, and accountability (Ashadi, 2011b; Amira & Permatasari, 2022) are all significant.

Globally, the landscape of research in this domain is continually evolving. Trends such as the integration of cutting-edge technology in information systems (Bodnar & William, 2010; Widiana, 2015; Damayanti & Dionisia, 2016), a deeper understanding of motivational dynamics, and advancements in internal control mechanisms are reshaping the way employee performance is viewed and managed across various organizations. In the milieu of this ongoing innovation, investigating how these aspects influence employee performance at Bank Danamon, and leveraging these insights for broader application, is of paramount importance.

The imperative to deepen understanding of the interplay between these factors and employee performance, both at the local level of PT. Bank Danamon Ambon Branch and globally, is evident. Such exploration is crucial for optimizing organizational performance in an ever-evolving business landscape.

2. Methodology

2.1 Population and Sampling Methodology

The research encompassed all employees at PT. Bank Danamon Ambon Branch as its population. Purposive sampling was employed, selecting a diverse array of employees across various positions and departments within the branch. This method facilitated the incorporation of a broad spectrum of perspectives pertinent to the investigated factors.

2.2 Data Collection

Data was collated through a triad of methods: questionnaires, interviews, and document analysis. Questionnaires were designed to evaluate employee satisfaction concerning the AIS, work motivation, and internal control. Interviews provided in-depth insights into the employees' perspectives and experiences. Analysis of internal bank documents offered an examination of pertinent reports, policies, and data relevant to the research.

2.3 Measurement

In the questionnaires, a 5-point Likert scale was utilized to measure employee satisfaction levels related to the AIS, work motivation, and internal control. This scale ranged from "Very Dissatisfied" to "Very Satisfied," enabling an assessment of the variability in employees' perceptions.

2.4 Statistical Analysis

Multiple linear regression was the chosen statistical analysis method. This facilitated the examination of the relationships between independent variables (AIS, work motivation, and internal control) and the dependent variable (employee performance). Hypotheses were formulated to correspond with the anticipated relationships between these variables.

2.5 Data Analysis

The demographic data of employees and questionnaire results underwent descriptive analysis, involving calculations of mean, median, and standard deviation to evaluate data distribution and variability. The regression analysis incorporated regression coefficients, p-values, and R-squared values, providing a measure of the strength and significance of the relationships under scrutiny.

2.6 Assumption Testing

Tests were conducted on regression assumptions, including normality, homoscedasticity, and the absence of multicollinearity. This ensured the suitability of the data for regression analysis and the reliability of the results.

This methodology was anticipated to yield a thorough understanding of the factors influencing employee performance at PT. Bank Danamon Ambon Branch, thereby aiding in the formulation of strategies to enhance employee productivity and efficiency.

3. Results and Discussion

In evaluating the validity and reliability of the study, it was found that the validity test results (r-values) for all variables exceeded the threshold table value of 0.312. Furthermore, the Cronbach's Alpha reliability values for these variables were all above 0.6. This indicates that the variables utilized in this study are both valid and reliable.

3.1 Normality Test

The normality test conducted in this study was intended to assess whether the variables conform to a normal distribution. The PP Plot (referenced in Figure 1) revealed a notable clustering of data points along the diagonal line, suggesting a close approximation of the variables to a normal distribution. Consequently, the assumption of a normal distribution is considered to be valid for all variables examined in this study.
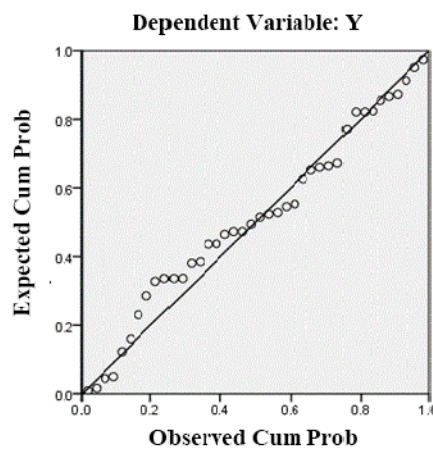
Figure 1. Data normality test results

3.2 Multicollinearity Test

Table 1. Multicollinearity test

| Variable	Mark Tolerance	VIF	Status
AIS (X1)	0.314	3,183	
Work Motivation (X2)	0.234	4,274	Free test results multicollinearity
Internal Control (X3)	0.317	3.154	

Source: SPSS Output Appendix, 2023

In Table 1, the multicollinearity test was carried out to detect any multicollinearity among the independent variables. Results, especially in terms of tolerance values and the Variance Inflation Factor (VIF), indicated that the variables—AIS (X1), Work Motivation (X2), and Internal Control (X3)—did not exhibit significant multicollinearity concerns. Tolerance values exceeding 0.10 and VIF values remaining below the threshold of 10 substantiated the absence of notable multicollinearity among these variables.

3.3 Heteroscedasticity Test

The heteroscedasticity test in this study was conducted by analyzing the dispersion of points on the Scatter plot, as illustrated in the figure below.

Finally, the heteroscedasticity test was conducted to assess the presence of unequal variance within the dataset. Analysis of the scatter plot (referenced in Figure 2) revealed a dispersion pattern suggestive of variance inequality among the data points. However, this pattern did not constitute a significant breach of the heteroscedasticity assumption.

Scatterplot

Dependent Variable: Y
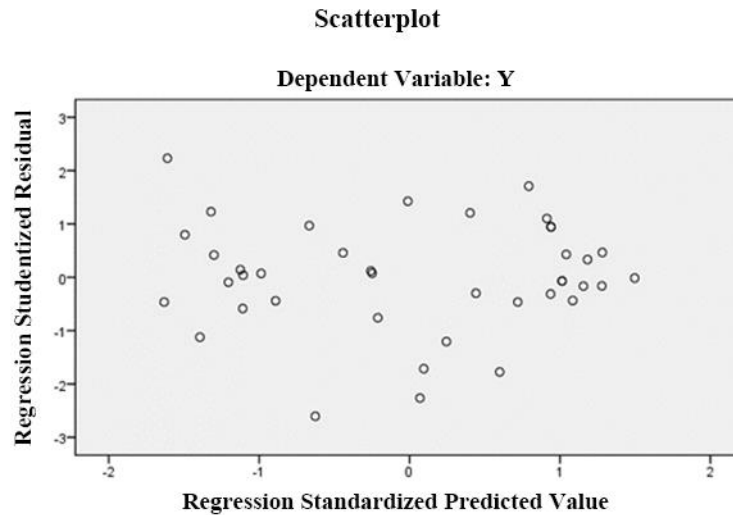
Figure 2. Heteroscedasticity test results

In summary, the results of the normality, multicollinearity, and heteroscedasticity tests collectively affirm the validity and reliability of the study's variables. The normality test showed a close alignment with a normal distribution, the multicollinearity test established a lack of significant multicollinearity among the independent variables, and the heteroscedasticity test did not uncover any major contravention of heteroscedasticity assumptions. Consequently, these findings lead to the conclusion that the study's variables are valid and reliable for subsequent analysis.

3.4 Multiple Linear Regression Analysis

Table 2. Recapitulation of multiple linear regression analysis

Free Variables	Regression Coefficient	T-Count	Significance (Sig.t)
AIS	0.375	5,472	0.000
Work motivation	0.200	3,465	0.001
Internal control	0.597	6,394	0.000
Constant = 0.825			
F count = 326,788			
Adjusted R2 = 0.962			
R = 0.965			
Dependent Variable (Y) Employee Performance			

Based on the data presented in Table 2, the multiple linear regression equation can be articulated as follows: Y = 0.825 + 0.375X1 + 0.200X2 + 0.597X3 + e.

In this statistical analysis, the regression coefficient indicates the expected average change in the dependent variable (employee performance) for a one-unit alteration in each independent variable, while holding other independent variables constant. A higher coefficient value reflects a more pronounced effect on the dependent variable. According to the table, each independent variable－AIS (X1), Work Motivation (X2), and Internal Control (X3)－exhibits a positive coefficient, suggesting that an increment in any of these variables correlates with an enhancement in employee performance.

The t-count is employed to ascertain the significance of the independent variables on the dependent variable. A greater t-statistic implies a more substantial impact of the variable on the dependent variable. In this analysis, all three independent variables demonstrate high t-count, indicating their robust statistical significance in relation to employee performance.

The significance (Sig.t) value represents the statistical significance of the observed t-statistic. A Sig.t value approaching zero denotes a highly significant statistical relationship between the independent variables and employee performance.

Moreover, the regression analysis highlights a significant combined impact of the independent variables on the dependent variable, as evidenced by a high F-statistic (326,788) and an elevated Adjusted R-squared value (0.962). The Adjusted R-squared value is indicative of the model's fitness, with a value nearing 1 suggesting that the independent variables substantially explain the variability in the dependent variable.

The R-squared (R^2) and Adjusted R-squared values are measures of how effectively the independent variables

account for the variance in the dependent variable. A high R-squared value of 0.965 implies that approximately 96.5% of the variation in employee performance is explainable by the independent variables in this regression model. Therefore, from a statistical standpoint, the independent variables exert a significant influence on employee performance.

(1) AIS:
- Regression Coefficient: 0.375
- Interpretation: An increase of one unit in the AIS results in an estimated average rise of 0.375 points in Employee Performance. This relationship indicates a positive correlation between the efficacy or quality of the AIS and employee performance. Thus, enhancing the AIS within an organization is likely to lead to improved employee performance.

(2) Work Motivation:
- Regression Coefficient: 0.200
- Interpretation: A one-unit augmentation in work motivation is projected to yield an average increase of 0.200 points in employee performance. This suggests a positive association, where higher levels of work motivation correspond with enhanced employee performance. Consequently, the variable of work motivation positively influences employee performance.

(3) Internal Control:
- Regression Coefficient: 0.597
- Interpretation: A one-unit increment in internal control within an organization is associated with an average increase of 0.597 points in employee performance. This finding implies that more robust internal control systems are linked to higher expected employee performance, indicating a significant positive impact of the internal control variable on employee performance.

In summary, the regression coefficients provided illustrate that each independent variable—AIS, Work Motivation, and Internal Control—is positively related to Employee Performance. These coefficients quantitatively describe the magnitude of influence or contribution of each variable to employee performance in the regression model.

Table 3. ANOVA results of data analysis

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	ANOVA b					
1	Regression	2557679	3	852560	326,788	.000a
	Residual	93,921	36	2,609		
	Total	2651,600	39			

Note: a. Predictors: (Constant), X3, X1, X2; b. Dependent Variable: Y
Source: Processed Data, 2023

Based on the findings delineated in the Table 3, the overall regression model is determined to be statistically significant. This conclusion is supported by the notably high F-value of 326.788 and an exceptionally low significance level (Sig. = 0.000).

Therefore, the simultaneous testing within the multiple regression framework suggests that at least one of the predictor variables (X1, X2, and X3) has a collectively significant influence on the dependent variable (Y). In this scenario, the amalgamation of these independent variables substantially contributes to the variance observed in the dependent variable within the context of the multiple regression model.

4. Discussion

The study at hand delves into the influence of AIS, work motivation, and internal control mechanisms on employee performance. This investigation, drawing from various scholarly sources, aims to elucidate the dynamics of these relationships.

Impact of AISs on Employee Performance: As noted by Romney & Steinbart (2011), AIS technology is instrumental in generating diverse financial information critical for planning, control, and decision-making processes. The utility of financial reports generated via AIS, serving as key managerial decision-making tools, is well-established. A study conducted by Indriawaty (2015) at PT. Bank Danamon Branch Office Ambon, utilizing multiple regression analysis, identified a significant correlation between AIS and employee performance. A notable significance value (sig) of 0.000, falling below the accepted threshold of 0.05, was observed, underscoring the positive impact of AIS on employee performance. The coefficient β of 0.375 further quantifies this relationship, implying that the implementation of AIS at the said branch is satisfactory.

Impact of Work Motivation on Employee Performance: Work motivation is a pivotal factor in driving employee performance. Ashadi (2011a) describes work motivation as an internal stimulus propelling individuals in an

organization to utilize their capabilities and time efficiently. Safitri (2017b) underscores the role of job motivation in enhancing employee zeal and performance. The absence of motivation can detrimentally affect organizational goals. Studies by Indriawaty (2015) and Safitri (2017b) corroborate the substantial influence of work motivation on employee performance. The significance values (sig) in these studies, recorded at 0.001 and 0.000 respectively, denote statistically significant relationships. The coefficient β values of 0.200 and 0.597 reflect a strong positive correlation between work motivation and employee performance, indicating that enhanced job motivation is associated with improved performance.

Impact of Internal Control Mechanisms on Employee Performance: Internal control mechanisms play a critical role in safeguarding assets, validating the accuracy of financial information, and promoting operational efficiency. Afrilia (2018) emphasizes the beneficial effects of efficient internal controls on organizational performance, which in turn affects employee productivity. A study by Maharani (2015) on XYZ Company, using multiple regression analysis, revealed a significant link between internal control mechanisms and employee performance. The observed significance value (sig) of 0.000 indicates a statistically significant relationship, with the coefficient β of 0.597 illustrating a substantial positive impact of internal control on staff performance. Consequently, it is inferred that effective implementation of internal control positively influences employee performance.

In summary, the analysis presented in this paper, supported by relevant literature, indicates a positive association between AIS, work motivation, and internal control mechanisms with employee performance. Each of these factors contributes distinctly yet significantly to enhancing employee productivity and efficiency.

5. Conclusions

This research has established that AIS, work motivation, and internal control mechanisms exert significant influences on employee performance. It has been demonstrated that AIS technology, by providing essential financial information, facilitates effective planning, control, and decision-making, thereby augmenting employee performance. Furthermore, work motivation has been identified as a critical factor in driving employees to invest effort and achieve organizational goals. A deficiency in work motivation has been linked to diminished employee performance. Moreover, internal control mechanisms, which play a pivotal role in asset protection, accuracy assurance, efficiency enhancement, and policy enforcement, have been found to positively impact employee performance.

Empirical evidence from various studies corroborates these findings, underscoring the integral roles of AIS, work motivation, and internal control in boosting employee performance. Therefore, it is recommended for organizations to prioritize the implementation of proficient AIS, cultivate work motivation, and establish stringent internal control mechanisms. Such measures are anticipated to optimize employee performance.

These conclusions, derived from comprehensive empirical analyses, offer profound insights into the intricate dynamics between these factors and their influence on employee performance. They contribute significantly to the understanding of organizational effectiveness and the enhancement of employee productivity.

Data Availability

The data used to support the research findings are available from the corresponding author upon request.

Conflicts of Interest

The authors declare no conflict of interest.

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