

A Perspective of Theory Technology-To-Performance Chain (TPC): Accounting Information Systems, Internal Control and Work Motivation on Employee Performance

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ARTICLE INFO

Keywords: Accounting Information Systems, Internal Control, Work Motivation, Employee Performance

Received : 5 January

Revised : 13 January

Accepted: 23 February

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ABSTRACT

The advancement of technology is a reflection of the contemporary era, continually evolving to address the changing needs of humanity. Beyond the widespread demand for accounting information systems, it is crucial to recognize the substantial influence that internal control and work motivation wield over employee performance. This research endeavors to examine the impact of accounting information systems, internal control, and work motivation on the performance of PT Arfia Megah's employees. The study employs a saturated sampling method, encompassing the entire population of 40 employees at PT Arfia Megah. The independent variables under scrutiny include accounting information systems, internal controls, and work motivation, while employee performance serves as the dependent variable. Utilizing a quantitative approach, primary data is collected through a questionnaire, and the analysis is conducted using the multiple regression method. The findings affirm a positive correlation between accounting information systems, internal control, work motivation, and enhanced employee performance

INTRODUCTION

of globalization, the swift evolution of information technology is a consequential outcome. This technological progress, a hallmark of the times, intensifies competition in the business landscape, constantly adapting to evolving human needs (Sopian & Suwartika, 2019). Information technology's pivotal role in developing internal information systems within companies is underscored by its ability to furnish rapid, accurate, and centralized information sources. The accounting information system emerges as a crucial organizational component, enhancing the efficiency and effectiveness of various processes, decision-making, and teamwork (Sopian & Suwartika, 2019).

Recognized by both external and internal stakeholders, accounting information systems cater to the planning, supervision, and control needs of managers and employees alike, providing insights into career prospects within the company (Sopian & Suwartika, 2019). According to Rahmawati (2018), an accounting information system yields efficiency in processing information, thereby enhancing decision-making capabilities. Functionally, it captures and stores company activities, the associated resources, and the involved actors, subsequently transforming data into management-utilizable information while ensuring adequate control.

Internal control, an inseparable facet of the accounting information system, involves processes enacted by the board of commissioners, management, and other personnel within a company (Rahmawati, 2018). A robust internal control system encompasses clear functional responsibilities, a sound authorization and recording system, and sufficient resources. Internal control strives to assure the reliability of financial reporting, compliance with regulations, and the efficacy of operations in achieving company objectives.

Within the realm of internal control, a focal point is the evaluation of company and individual performance, with performance defined as the outcomes derived from fulfilling responsibilities. Notably, employee performance is a critical metric for business success, especially in the face of global market challenges and competition. Mulyadi (2016) identifies two types of internal control system purposes: accounting internal control, safeguarding assets and ensuring accounting data accuracy, and administrative internal control, promoting efficiency and compliance with management policies.

In this dynamically evolving technological landscape, companies must adapt, surpass consumer expectations, and contend with fierce competition. A strategic approach involves enhancing employee performance, integral to a company's success. Performance measurement, as per Putri & Endiana (2020), serves to motivate personnel towards company goals and align actions with predefined standards. The interplay between employee performance and the accounting information system is acknowledged by Sopian & Suwartika (2019), positing that a well-designed system, characterized by ease of use, quick access, reliability, flexibility, and data security, contributes to employee satisfaction.

The scope of accounting information systems extends beyond financial data processing, encompassing non-financial data vital for decision-making. Work motivation, another critical variable, is described by Valentino Anggara &

Yadnyana (2019) as a psychological aspect resulting from interactions between employees and their environment. Motivation propels individuals to fulfill goals, and fostering good work motivation is crucial for encouraging employee diligence.

This research, situated at PT Arfia Megah, a chemical industry company leveraging technology in its new information system, explores the impact of accounting information systems, internal control, and work motivation on employee performance. The study addresses challenges arising from the lack of employee understanding of the new accounting information system, attributed partly to inadequate socialization. Building on prior research disparities, the study aims to shed light on the intricate relationships between accounting information systems, internal control, work motivation, and employee performance at PT Arfia Megah.

LITERATURE REVIEW

The Technology-to-Performance Chain (TPC) theory, as elucidated by Goodhue and Thompson (1995), stands as a pioneering research model that delves into the influence of information technology on both individual and organizational performance. This model, a synthesis of the used model and the fit model posits that for technology to exert an impact on performance, it must first be effectively employed and aligned with tasks supported by the technology. The Technology-to-Performance Chain model offers a nuanced understanding of the intricate relationships between technology, user tasks, and the interconnected facets of performance (Goodhue & Thompson, 1995).

In essence, TPC theory asserts that technology plays a positive role in individual performance by facilitating task completion and subsequently impacting overall performance. This holds particularly true in the realm of accounting information systems, where technology has evolved into a pivotal tool for companies seeking to enhance their performance (Al-Eqab & Adel, 2013).

Research Hypothesis

Impact of Accounting Information Systems on Employee Performance

According to Sopian and Suwartika (2019), to enhance interest in accounting information systems, it is imperative to persuade users that these systems can significantly improve their performance. Companies must assure employees that accounting information systems contribute to increased productivity, efficiency, and the quality of work output. The hypothesis posited is as follows: H1: Accounting Information System has a positive impact on employee performance.

Impact of Internal Control on Employee Performance

Internal control, as elucidated by Sopian and Suwartika (2019), is a process implemented by a company to safeguard its assets and ensure the reliability of financial reporting, operational effectiveness, compliance with laws and regulations, and adherence to management policies. Effective internal control, which involves good procedures and systems, positively influences employee performance by controlling how a company safeguards assets, checks the authenticity of administrative or accounting processes, enhances operational

efficiency, and upholds compliance. The hypothesis is formulated as follows: H2: Internal controls have a positive impact on employee performance.

Impact of Work Motivation on Employee Performance

Motivation can influence the implementation of accounting information systems either positively or negatively, as noted by Valentino Anggara and Yadnyana (2019). Higher work motivation is linked to higher performance. Similarly, Rozi et al. (2021) emphasize the importance of work motivation in sustaining efforts at work and driving work spirit to achieve goals. The hypothesis is stated as follows: H3: Work motivation has a positive impact on employee performance.

Impact of Accounting Information Systems, Internal Control, and Work Motivation on Employee Performance

Sopian and Suwartika's (2019) research indicates that accounting information systems and internal control systems are crucial supporting activities for efficient main activities. The lack of a significant positive impact on employee performance, as noted by Masriah et al. (2022), may be attributed to employees' underutilization of accounting information systems and incomplete application of internal control systems in financial reporting activities. The comprehensive hypothesis posits that there is a simultaneous influence of accounting information systems, internal controls, and work motivation on employee performance: H4: There is a simultaneous influence of accounting information systems, internal controls, and work motivation on employee performance.

METHODOLOGY

In this study, the statistical analysis employed multiple linear regression, a method designed to assess the impact of two or more independent variables on a dependent variable characterized by an interval or ratio measurement scale, within a linear equation. The multiple regression model, utilized herein, aimed to explore the influence of accounting information systems (X1), internal control (X2), and work motivation (X3) on employee performance (Y). Through this analysis, the objective was to ascertain the direction of the relationship between the dependent and independent variables, delineating whether each independent variable exhibits a positive or negative correlation. Additionally, the model aimed to predict the potential change in the dependent variable's value as a consequence of an increase or decrease in the independent variable's value. The data utilized in this analysis typically adheres to an interval or ratio scale. The regression formula applied for this purpose is:

$$Y = a + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e$$

In this case, it is:

a = constant

X1 = Accounting Information System

X2 = Internal Control

X3 = Work Motivation

Y = Employee Performance

$\beta_1\beta_2\beta_3$ = Regression coefficient for X1, X2, X3

e = disturbance/error factor

RESEARCH RESULT

Multiple Linear Regression Analysis

The application of multiple linear regression analysis aims to assess the impact of two or more independent variables on a single dependent variable, expressed through a regression equation. The outcomes of the multiple linear regression test are subsequently presented as follows:

Table 1 Linear Regression Analysis

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	4,944	2,555		1,935	,061
	Accounting Information System (X1)	,374	,107	,381	3,488	,001
	Internal Control (X2)	,282	,094	,336	3,001	,005
	Work Motivation (X3)	,236	,089	,325	2,658	,012

a. Dependent Variable: Employee Performance (Y)

From the coefficient values above, a multiple regression equation can be compiled.

$$Y = a + bx_1 + bx_2 + bx_3 + e$$

Then:

$$Y = 4.944 + 0.374x_1 + 0.282x_2 + 0.236x_3 + e$$

Where:

The equation is elucidated as follows: when the constant is a positive 4.944, it implies that if variables X1 through X3 are either zero (0) or maintain a constant value, variable Y will have a value of 4.944.

a. Variable X1

The regression coefficient for variable X1 is 0.374, indicating that a one-unit increase in variable X1 will result in a 0.374-unit increase in variable Y. The positive coefficient signifies a unidirectional relationship, suggesting that as variable X1 increases, variable Y also increases.

b. Variable X2

The regression coefficient for variable X2 is 0.282, indicating that a one-unit increase in variable X2 will lead to a 0.282-unit increase in variable Y. The positive coefficient indicates a consistent direction between variable X2 and variable Y, meaning that an increase in X2 corresponds to an increase in Y.

c. Variable X3

The regression coefficient for variable X3 is 0.236, denoting that a one-unit increase in variable X3 will result in a 0.236-unit increase in variable Y. The

positive coefficient highlights a consistent relationship between variable X3 and variable Y, indicating that as X3 increases, Y also increases.

Hypothesis Test

1. Test t (partial test)

The t-test is employed to conduct a partial examination of the impact of the independent variable on the dependent variable. The orientation of the variable influence is discerned through the evaluation of the regression coefficient value. A positive regression coefficient value indicates that the independent variable has a positive impact on the dependent variable. Conversely, a negative regression coefficient value suggests that the independent variable exerts a negative effect on the dependent variable.

Table 2. Statistical Test

Model		Unstandardized Coefficients ^a		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	4,944	2,555		1,935	,061
	Accounting Information System (X1)	,374	,107	,381	3,488	,001
	Internal Control (X2)	,282	,094	,336	3,001	,005
	Work Motivation (X3)	,236	,089	,325	2,658	,012

a. Dependent Variable: Employee Performance (Y)

a. Variable X1

According to the provided t-test table, the impact of variable X1 on variable Y is indicated by a p-value of 0.001, which is less than the significance level of 0.050. Additionally, the calculated t value of 3.488 exceeds the tabulated t value of 2.02809. Consequently, the null hypothesis (Ho) is rejected, and the alternative hypothesis (H1) is accepted, signifying that variable X1 indeed influences variable Y.

b. Variable X2

As per the t-test table, the effect of variable X2 on variable Y is characterized by a p-value of 0.005, falling below the significance threshold of 0.050. Furthermore, the calculated t value of 3.001 surpasses the tabulated t value of 2.02809. Hence, the null hypothesis (Ho) is rejected in favor of the alternative hypothesis (H2), indicating the presence of an effect of variable X2 on variable Y.

c. Variable X3

According to the t-test table provided, the impact of variable X3 on variable Y yields a p-value of 0.012, which is less than the significance level of 0.050. Moreover, the calculated t value of 2.658 exceeds the tabulated t value of 2.02809. Consequently, the null hypothesis (Ho) is rejected, and the alternative

hypothesis (H3) is upheld, demonstrating the influence of variable X3 on variable Y.

2. F Test (Simultaneous Test)

The F statistical test serves as a tool for assessing the viability of a model or statistically testing whether the regression coefficients of independent variables collectively impact the dependent variable.

Table 3. F-Statistical Test

ANOVA ^a						
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	143,876	3	47,959	24,481	,000 ^b
	Residual	70,524	36	1,959		
	Total	214,400	39			

a. Dependent Variable: Employee Performance (Y)

b. Predictors: (Constant), Work Motivation (X3), Accounting Information System (X1), Internal Control (X2)

Referring to the provided table, it is evident that the computed F value surpasses the F table value ($24.481 > 2.86$), accompanied by a significance value of 0.000, which is less than the threshold of 0.05. Consequently, the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted, indicating that variables X1 to X3 collectively influence variable Y when tested simultaneously.

3. Determination Coefficient Test (Adjusted R²)

The determination coefficient test is conducted to elucidate the model's precision or gauge the extent to which independent variables can elucidate the variance in the dependent variable. The coefficient of determination ranges between zero and one, with a lower R² indicating a limited ability of independent variables to expound the dependent variable.

Table 4. Coefficients of Determination

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,819 ^a	,671	,644	1,39965	1,688

a. Predictors: (Constant), Work Motivation (X3), Accounting Information System (X1), Internal Control (X2)

b. Dependent Variable: Employee Performance (Y)

Based on the information presented in the table, it is evident that the coefficient of determination (R^2) stands at 0.897. This value indicates that the combined influence of Accounting Information System, Internal Control, and Work Motivation variables on Employee Performance is 64.4%. The remaining 35.6% is attributed to other variables not considered in this research.

DISCUSSION

1. Impact of Accounting Information System (X1) on Employee Performance (Y):

The findings reveal a substantial positive impact of accounting information systems on employee performance, aligning with a prior study by Nugroho et al. (2019). This study contrasts with the earlier work of Sopian and Suwartika (2019), which suggested a partially negative impact, though not statistically significant. Implementing accounting information systems, especially transitioning from manual to digital recording, enhances employee performance in line with technological advancements.

2. Impact of Internal Control (X2) on Employee Performance (Y):

Internal control is shown to have a partially significant influence on employee performance, consistent with the research of Nugroho et al. (2019). Effective internal control systems positively affect employee performance, as indicated by the study.

3. Impact of Work Motivation (X3) on Employee Performance (Y):

Work motivation significantly influences employee performance, corroborating the findings of previous research by Widhawati and Damayanti (2018). External motivation and support play a crucial role in driving positive behavior and prompt completion of responsibilities within the organization.

CONCLUSION AND RECOMMENDATIONS

This study aimed to explore the impact of accounting information systems, internal control, and work motivation on employee performance at PT. Arfia Megah. Key conclusions include the significant positive impact of accounting information systems, internal control, and work motivation on employee performance. Further research is encouraged to expand and refine these findings, providing new insights and contributing to the development of theories guiding the assessment of financial reporting quality.

For PT Arfia Megah, maintaining and prioritizing internal controls is recommended, given their positive influence on employee performance. The simultaneous impact of accounting information systems, internal control, and work motivation serves as a benchmark for future academic, student, and researcher endeavors in exploring factors influencing employee performance and advancing theories in financial reporting quality.

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