

Research Article

The Impact of Accounting Information Systems, Internal Controls, and Digital Transformation on Financial Performance in Semarang's Furniture Industries

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Abstract: This research is motivated by the fluctuating financial performance in the furniture industry in Semarang City, amidst the pressures of digitalization and strengthening internal governance. Based on the Technology Acceptance Model (TAM), which posits that technology acceptance through perceptions of usefulness and ease of use can influence organizational performance, this study aims to examine the impact of Accounting Information Systems (AIS), Internal Control Systems (ICS), and Digital Transformation on financial performance in the furniture industry. Using a quantitative approach with multiple linear regression, the study sampled all 61 furniture companies in Semarang City. The results from the partial test (t-test) reveal that AIS has a positive but insignificant effect on financial performance ($t=0.485$; $\text{sig}=0.629$), ICS has a positive but insignificant effect ($t=1.827$; $\text{sig}=0.073$), while Digital Transformation has a positive and significant effect ($t=4.516$; $\text{sig}=0.000$). These findings suggest that digital transformation is the dominant factor in improving financial performance, while AIS and ICS have not yet had a significant impact. The study recommends improving digital literacy, strengthening AIS implementation, and integrating ICS for more sustainable financial performance.

Keywords: Accounting Information System; Digital Transformation; Financial Performance; Furniture Company; Internal Control System.

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1. Introduction

The development of the furniture industry in Semarang City is facing competitive pressure and increasingly intensive digitalization acceleration. Changes in the business environment require companies to be able to adapt thru the utilization of Accounting Information Systems (AIS), strengthening Internal Control Systems (ICS), and implementing digital transformation to maintain and improve financial performance. Financial performance becomes the main indicator of business sustainability because it reflects the effectiveness of resource management and the company's ability to survive amidst market dynamics. However, the reality on the ground shows that not all companies are able to fully optimize the systems and technologies they possess, necessitating empirical studies to provide answers regarding the direction and effectiveness of the implementation of these three aspects.

Theoretically, this research is based on the Technology Acceptance Model (TAM), which asserts that technology acceptance is influenced by the perception of usefulness and ease of use (Davis, 1989). The concept of Accounting Information Systems (AIS) refers to systems designed to produce relevant and reliable financial information for managerial decision-making (Romney & Steinbart, 2018), while Internal Control Systems (ICS) refer to the internal control framework that emphasizes the control environment, control activities, information and communication, and monitoring to maintain the reliability of financial reporting (COSO,

2013). Various previous studies have shown that AIS has a positive effect on financial performance, but it is not always significant (Mayasari, et al, 2022), similarly, the internal control system (ICS) in some studies has a positive effect but has not been statistically consistent (Agnes, et al, 2024). Meanwhile, research on digital transformation generally shows a positive and significant impact on company performance (Lantip, 2023), but there are also studies that find digital transformation to have a negative and insignificant impact on company performance (Purnamasari & Asharie, 2024). Nevertheless, the existing literature has not extensively examined the three variables—SIA, SPI, and digital transformation—simultaneously in the context of the furniture industry in Semarang City, leaving a research gap in the integrative and contextual aspects of the sector.

This research aims to analyze and test the influence of SIA, SPI, and Digital Transformation on the financial performance of the furniture sector industry members of HIMKI in Semarang City. The research question posed is whether each of these variables has a partial or simultaneous effect on the financial performance of the company.

Compared to previous studies, this research simultaneously examines the influence of Accounting Information Systems, Internal Control Systems, and Digital Transformation on financial performance in the specific context of the furniture industry in Semarang City using a census method on the entire population of 61 companies. Unlike previous studies that generally examined these variables partially or in different sectors. This research enriches the literature by presenting contextual empirical evidence that shows differences in the significance levels of variables within a single integrated model.

2. Literature Review

Technology Acceptance Model (TAM)

The grand theory underlying this research is the Technology Acceptance Model (TAM). TAM was first developed by Davis (1989) and subsequently refined into TAM 2 by Venkatesh and Davis (2000) and TAM 3 by Venkatesh and Bala (2008). TAM 3 explains that technology acceptance is influenced by two main constructs, namely perceived usefulness and perceived ease of use. Perceived usefulness includes output quality, job relevance, result demonstration, and perceived control, while perceived ease of use is influenced by computer self-efficacy, external control, anxiety, playfulness, enjoyment, and objective usability. Conceptually, TAM asserts that the higher the perception of benefits and ease of use of a technology, the greater the level of acceptance and usage in organizational activities.

In this study, TAM is used as a theoretical foundation to explain the relationship between technology acceptance and financial performance. The implementation of Accounting Information Systems, Internal Control Systems, and Digital Transformation (DT) in the furniture industry in Semarang is understood as a form of technology adoption whose success is influenced by perceptions of usefulness and ease of use. These independent variables are assumed to enhance the effectiveness of system usage, reduce errors, accelerate the reporting process, and improve operational efficiency. Thus, a high level of technology acceptance is expected to contribute to the improvement of financial performance as the dependent variable in this study.

Financial Performance

Financial performance is the dependent variable in this study. According to Horne (2012), financial performance is an analysis to assess the extent to which a business has implemented financial execution rules properly and correctly in achieving business objectives. Financial performance reflects the ability of business operators to manage resources effectively and efficiently. In addition, financial performance is also defined as a depiction of a business's financial condition analyzed thru financial analysis tools to assess the financial position and potential of the company in the future (Financial Statement Analysis – Rajawali Pers, 2019). The assessment is generally conducted thru financial ratio analysis, which includes liquidity, profitability, and solvency.

In this study, financial performance is positioned as the dependent variable influenced by Accounting Information System, Internal Control System, and Digital Transformation. The measurement of financial performance is based on indicators that reflect the company's liquidity, profitability, and solvency conditions. This variable is used to assess the extent to which the implementation of systems and technology in the member companies of HIMKI Semarang contributes to the improvement of financial conditions and the achievement of business goals effectively and efficiently.

Accounting Information System

Accounting Information System is a system that functions to collect, record, store, and process transaction data to produce relevant information for decision-making. Romney and Steinbart state that "Accounting Information System is a system that collects, records, stores,

and processes data to produce information for decision makers" (Romney & Steinbart, 2018). Thus, Accounting Information System not only serves as a tool for recording transactions but also as a strategic instrument in providing accurate, timely, and reliable financial information for management.

In this study, the Accounting Information System is positioned as an independent variable assumed to affect the company's financial performance. Operationally, the Accounting Information System is measured based on respondents' perceptions of the effectiveness of the system's implementation in supporting the processes of transaction recording, data processing, and financial report presentation. The purpose of testing this variable is to determine the extent to which the implementation of Accounting Information System in furniture companies in Semarang City can support the improvement of financial performance.

Internal Control System

The Internal Control System is a process designed to provide reasonable assurance regarding the achievement of organizational objectives. The Committee of Sponsoring Organizations of the Treadway Commission states that "Internal control is a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives" (COSO, 2013). This definition emphasizes that internal control encompasses the effectiveness and efficiency of operations, the reliability of financial reporting, and compliance with applicable regulations.

In this study, Internal Control System is positioned as an independent variable that is believed to influence financial performance. The measurement of variables is based on internal control components, which include the control environment, risk assessment, control activities, information and communication, and monitoring activities. This study examines whether the implementation of Internal Control System in furniture companies in Semarang City can contribute to the improvement of financial performance.

Digital Transformation

Digital transformation is the process of integrating digital technology into all aspects of business, changing the way organizations operate and create value. In the perspective of the Technology Acceptance Model (TAM), Davis states that "Perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance" and "Perceived ease of use is the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989). This concept emphasizes that the success of digital transformation is influenced by the perception of the benefits and ease of use of technology.

In this study, digital transformation is positioned as an independent variable tested for its impact on financial performance. This variable is measured based on the level of utilization of digital technology in business processes, the use of digital-based systems, and the company's ability to adapt to technological developments. The testing is conducted to determine whether digital transformation has a positive and significant impact on the financial performance of furniture companies in Semarang City.

3. Materials and Method

This research uses a quantitative approach with multiple linear regression analysis. This approach is used to statistically test the influence of Accounting Information Systems, Internal Control Systems, and Digital Transformation on Financial Performance.

The population of this study consists of 61 furniture companies in Semarang City in 2025, with the entire population being sampled using the census method to make the research more representative. The data used are primary data in the form of questionnaires compiled based on variable indicators and secondary data from literature. Data were collected using a Likert scale questionnaire. The research instrument was tested for validity and reliability to ensure accuracy and consistency.

Data analysis includes classical assumption tests (Normality, Multicollinearity, Autocorrelation, and Heteroscedasticity) followed by multiple linear regression analysis. The testing was conducted using the t-test, f-test, and the coefficient of determination to measure the contribution of the independent variables to the dependent variable by using SPSS apk.

4. Results and Discussion

Descriptive analysis

The results of the analysis of responses from furniture industry respondents to the research variables show very good results, with high mean values for each variable. The accounting information system received a mean score of 4.226, with the highest indicator being the accuracy of financial reports (4.393) and the lowest being system errors (4.098). The internal control system received a mean score of 4.348, with the control environment as the highest indicator (4.574) and control activities as the lowest (3.984). Digital transformation received a mean score of 4.446, with the highest indicator being customer transactions and interactions (4.574) and the lowest being digital technology adaptation (4.213). Financial performance received the highest mean score of 4.475, with profit growth and financial decision-making as the highest indicators (4.541), while business revenue growth was the lowest indicator (4.393).

Analysis of Research Results

Classical Assumption Test

a. Normality Test

The Normality Test in this study uses the one-sample Kolmogorov-Smirnov test. The significance value of 0.193 indicates that the data is normally distributed because the significance value is > 0.05 .

b. Multicollinearity test

The calculation results show that the tolerance value for X1 is $0.635 > 0.10$ and the VIF value is $1.576 > 10$; for X2, the tolerance value is $0.497 > 0.10$ and the VIF value is $2.014 < 10$; for X3, the tolerance value is $0.451 > 0.10$ and the VIF value is $2.216 < 10$, indicating that there is no correlation between the independent variables.

c. Autocorrelation Test

Autocorrelation Test using Durbin Watson (dW). The Durbin Watson value is 1.899. With a dU value of 1.6904 and a dW value of 1.899, it can be concluded that there is no autocorrelation in the regression model because it meets the criteria $dU < dW < 4-dU$ ($1.6904 < 1.899 < 2.3096$).

d. Heteroscedasticity Test

The heteroscedasticity test uses the Glejser test. The calculation results show X1 $0.607 > 0.05$; X2 $0.150 > 0.05$; X3 $0.237 > 0.05$, indicating that this study is homogeneous or passes the heteroscedasticity test because all independent variables are > 0.05 .

Multiple Linear Regression Analysis

The result of the regression equation

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + e$$

$$Y = 0.3067 + 0.047 x_1 + 0.185 x_2 + 0.645 x_3 + e$$

The equation can be interpreted as follows:

- The constant of 3.067 indicates that if the independent variables X1, X2, and X3 are valued at zero, the value of the dependent variable Y is 3.067.
- The coefficient X1 (Accounting Information System) is 0.047 (positive value), which means the accounting information system has a positive influence on financial performance. Where it is assumed that a 1% increase in the X1 variable will increase the Y value by 0.047.
- The coefficient of X2 is 0.185 (positive value), which means the Internal Control System has a positive influence on financial performance. Assuming a 1% increase in the X2 variable, the value of Y will increase by 0.185.
- The coefficient of X3 is 0.645 (positive), meaning that Digital Transformation has a positive impact on financial performance. Where it is assumed that a 1% increase in the X3 variable will increase the value of Y by 0.645.

t-test (Hypothesis Test)

The results of the hypothesis test for the Accounting Information System obtained a t-value of $0.485 < t\text{-table } 2.002$ and a significance value of $0.628 > 0.05$, meaning it has a positive but not significant effect on financial performance. The Internal Control System obtained a t-value of $1.827 < t\text{-table } 2.002$ and a significance value of $0.073 > 0.05$, meaning it has a positive but not significant effect on financial performance. Digital transformation obtained a t-value of $4.516 > t\text{-table } 2.002$ and a significance value of $0.000 < 0.05$, meaning it has a positive and significant effect on financial performance.

Goodness of fit test (model suitability)

a. F Test

From the test results, the calculated F value is $27.628 >$ the table F value of 2.76 and the significance value is $0.000 > 0.05$, thus the regression model is declared fit or suitable as a research model.

b. Coefficient of Determination

The value of the coefficient of determination based on adjusted R^2 0.571 indicates that all independent variables can explain 57.1% of financial performance, while the remaining 42.9% is explained by other variables not included in this study.

Discussion***The Effect of Accounting Information Systems on Financial Performance***

The results of the t-test (hypothesis test) obtained a t-value of $0.448 <$ t-table 2.002 and a significance value of $0.628 < 0.05$, indicating that the Accounting Information System has a positive but not significant effect on Financial Performance. The results of this study are in line with the research conducted by (mayasari et.al., 2022).

Unlike the findings of Ardiani et al. (2024); Lubis & Lutfiansyag (2024); Riadi (2022); and Chasani (2025) who state that Accounting Information Systems have a positive and significant effect on financial performance, Nusron et al. (2024) argue that Accounting Information Systems have a negative but insignificant effect on financial performance.

The Effect of the Internal Control System on Financial Performance

The results of the t-test (hypothesis test) obtained a t-value of $1.827 <$ t-table 2.002 and a significance value of $0.073 > 0.05$, so the Internal Control System has a positive but not significant effect on financial performance. The results of this study are in line with the research conducted by (Agnes et al. 2024).

Unlike the research conducted by Margaretha Kaka & Ratnawati (2023) and Mayfriscia (2024), which stated that the Internal Control System has a positive and significant effect on Financial Performance, Amalia Syafitri & Elsa Meirina (2023) stated that the Internal Control System has a negative and insignificant effect on Financial Performance.

The Effect of Digital Transformation on Financial Performance

From the results of the t-test (hypothesis test), a t-value of $4.516 >$ t-table 2.002 and a significance value of $0.000 < 0.05$ were obtained, indicating that digital transformation has a positive and significant effect on financial performance. This research is in line with the studies conducted by (lantip, 2023) and (pratamansyah, 2024).

Unlike the research conducted by Purnamasari & Asharie (2024), which states that Digital Transformation has a negative but insignificant effect on Financial Performance.

5. Conclusion

Digital transformation is the dominant factor influencing the financial performance of the furniture industry in Semarang City. The results of the multiple linear regression show that the Accounting Information System and the Internal Control System have a positive but not significant effect on financial performance, whereas Digital Transformation has a positive and significant effect. Simultaneously, the research model is deemed feasible, with 57.1% of the variation in financial performance explained by the three independent variables. The main scientific contribution of this research lies in the simultaneous testing of SIA, SPI, and Digital Transformation within a single integrated model in the specific context of the furniture industry in Semarang City thru a census method involving 61 companies.

These findings reinforce the relevance of the Technology Acceptance Model (TAM) in explaining that the acceptance and utilization of technology—particularly in the form of digital transformation—are positively correlated with improved organizational performance. However, the results showing the insignificance of SIA and SPI indicate that the implementation of systems and controls has not yet been fully optimal in providing measurable financial impacts. From a methodological perspective, the use of a quantitative approach with multiple linear regression, the fulfillment of classical assumptions, and the census method enhance the internal validity and representativeness of the research findings.

This research recommends improving digital literacy and optimizing the implementation of accounting systems and integrated internal controls to provide a more significant contribution to financial performance. For future researchers, it is recommended to add other variables beyond this research model that have the potential to explain the 42.9% variation in financial performance that remains unexplained, as well as to expand the research objects to different sectors or regions to test the consistency of the findings comparatively.

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