# The Influence of Accounting Information Systems on Internal Control of Receivables

### (Study at one of the telecommunications companies in Bandung)

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# ABSTRACT

This study aims to investigate the impact of variables related to the accounts receivable accounting information system and accounts receivable internal control on a telecommunications company located in Bandung. Based on the obtained calculation results, it has been determined that the accounting information system for accounts receivable can be classified as moderately satisfactory. At the same time, the internal control measures for accounts receivable can also be classified as moderately satisfactory.

The research findings indicate a significant correlation of 0.840 between variables X and Y, suggesting a strong relationship between the accounts receivable accounting information system and accounts receivable internal control. According to the analysis conducted using simple linear regression, it has been shown that the relationship between the dependent variable Y and the independent variable X, representing accounts receivable in the accounting information system, can be expressed as Y = 7.180 + 0.729X. This condition implies that for each unit rise in the accounts receivable; there is an associated increase of 0.729 units in the dependent variable. The coefficient analysis reveals that the accounts receivable accounting information system significantly contributes to the internal control of accounts receivable, accounting for 70.6% of the overall influence. The remaining 29.4% can be attributed to various other factors.

Keywords: Accounting Information System, Internal Control of Receivables, Telecommunications

# INTRODUCTION

The intense competition prevalent in the contemporary information media landscape, particularly within the telecoms sector, substantially influences the participating corporations. Hence, organizations must establish an internal control system that can effectively aid and serve as a mechanism for implementing control measures. Effective internal control enables firm leaders to efficiently manage the organization's activities (Turetken, Jethefer & Ozkan, 2020; Ballester, González-Urteaga & Martínez, 2020).

Moreover, it can guarantee the accuracy and reliability of the information in the received reports in alignment with the Professional Accountant Standards. These standards emphasize the importance of implementing an internal control system that adheres to the guidelines established by the Indonesian Institute of Accountants. By doing so, auditors are guided in evaluating a client's internal controls during the financial statement audit by the standards set by the Indonesian Institute of Accountants. This condition will also aid management or the organization in establishing an internal control mechanism for accounts receivable, reducing the consequences of delayed payments and uncollectible accounts (Cooray et al., 2020; Yin et al., 2020).

The implementation of an accounts receivable internal control system represents an ongoing endeavor undertaken by a firm's management to optimize its operations' efficiency. An effective internal control system for accounts receivable is characterized by its ability to ensure accurate recording and accountability of all transactions related to accounts receivable. The implementation of internal controls for accounts receivable entails the execution, management, and organization of these accounts in a manner that is more focused and aims to prevent possible employee misbehavior.

The researcher has gathered empirical data indicating that the accounts receivable of a telecoms business in Bandung undergo annual changes. Upon examination of the data from 2018, it is evident that there was an increase in accounts receivable and uncollectible accounts. The year 2019 witnessed an upward trend in both accounts receivable and uncollectible accounts; however, in 2020, there was a decline in accounts receivable and a simultaneous increase in uncollectible accounts. In the year 2021, there was a notable

increase observed in both accounts receivable and uncollectible receivables. This phenomenon results in a rise in uncollectible accounts, leading the company to contemplate the repercussions or effects of these outstanding receivables.

The suboptimal state of the internal control system for accounts receivable in risk assessment, inadequate supervision and weaknesses in the accounts receivable accounting information system, and the proficiency of human resources in utilizing said information contribute to this phenomenon. Implementing an accounts receivable accounting information system is necessary for the firm to enhance the efficacy of its internal control system for accounts receivable. This is because information generation within a company needs more than just dependable and skilled human resources. The effectiveness of the internal control measures for managing accounts receivable appears to be unsatisfactory, potentially due to deficiencies in the accounts receivable accounting information system.

According to the findings of George, Theofanis, and Konstantinos (2015), as well as the research conducted by Oussii and Boulila Taktak (2018) and Purana and Sidharta (2018), it is argued that its level of integration does not solely determine the effectiveness of an information system.

The Accounting Information System (AIS) plays a vital role in enterprises' operations, encompassing service- and product-based organizations. Companies utilize this system to execute a range of routine financial transactions, both internal and external, thereby facilitating the decision-making process and enabling effective management oversight for enhanced company control (Chambers & Odar, 2015; Alzeban & Sawan, 2015; Jung & Cho, 2022).

The concerns above illustrate the relationship between the accounting information system and internal control over accounts receivable. The presence of an open system within the accounting information system does not provide a guarantee of immunity from errors or fraudulent activities. Hence, implementing effective internal control measures serves as a mechanism for safeguarding a system from potential risks and threats.

Based on the background above, the study problem might be formulated as follows: To what extent does the accounting information system affect the internal control system for

accounts receivable? The primary aim of this study is to assess the impact of the accounting information system on the internal control system for accounts receivable.

#### METHOD

The researcher utilized a methodology characterized by a methodical and rigorous inquiry to advance the existing body of knowledge. Additionally, it is a methodical undertaking structured to investigate particular difficulties that necessitate solutions.

The author employed the descriptive analysis research approach in this study. This methodology is utilized for data analysis, wherein the obtained data is described or depicted in its original form without the intention of making universally applicable conclusions or generalizations.

This methodology is employed to evaluate the hypotheses derived from the two variables under scrutiny, specifically examining the potential influence of one variable on another. The analysis is conducted in a systematic, objective, and precise manner, with a focus on factual evidence and relevant documentation.

The data gathered is subsequently juxtaposed with theories derived from lectures, books, or other reputable sources to formulate findings. These conclusions are then consolidated into a comprehensive report that examines the impact of the accounting information system on internal accounts receivable control. The present study employed a survey instrument to collect data from a sample of 30 person who possess expertise or involvement in the subject matter under investigation.

The operational variables employed in this study function as the independent (X) and dependent (Y) variables. This study examines the independent variables (X) of the Accounts Receivable Accounting Information System. These variables encompass several indicators such as hardware, software, accounts receivable application programs, implementers, maintenance, archiving, correctness, and speed of information access. This study focuses on the dependent variable, Internal Accounts Receivable Control (Y). This variable is assessed

through many indicators that pertain to the control environment, risk assessment, control activities, information and communication, and monitoring.

The process of data testing will encompass the evaluation of validity and reliability through the utilization of simple regression analysis. Before the actual testing, a preliminary model test will be performed, which will commence with evaluating classical assumptions such as normality and heteroscedasticity.

## DISCUSSION

Based on the calculation of the validity test correlation for variable (X) Accounting Information Systems with variable (Y) Internal Control of Receivables, the validity test correlation value for each statement is obtained, which can be seen in table 1 below.

Instrument	Variable X	Variabel Y
Instrument1	0.649	0.580
Instrument2	0.489	0.421
Instrument3	0.578	0.578
Instrument4	0.505	0.562
Instrument5	0.657	0.440
Instrument6	0.682	0.387
Instrument7	0.694	0.409
Instrument8	0.618	0.345
Instrument9	0.626	0.429
Instrument10	0.327	0.594
Instrument11	0.615	0.762
Instrument12	0.694	0.399

Table 1. Results of validity and reliability testing

Instrument13	0.527	0.476
Instrument14	0.693	0.678
Instrument15		0.420
Reliability		
Cronbach Alpha	0,900	0,837

Based on the findings presented in Table 1, the variables (X) Accounting Information System and (Y) Internal Accounts Receivable Control, each comprising 15 statement items, exhibit a correlation coefficient exceeding 0.3 and a Cronbach's Alpha coefficient surpassing 0.7. These results suggest that the questionnaire employed to measure the variables (X) Accounting Information System and (Y) Internal Accounts Receivable Control can be deemed reliable.

The findings of the traditional assumption testing also suggest that the data follows a normal distribution. The presence of a discernible pattern of data dispersion along the diagonal line in the P-P Plot graph indicates conformity to a typical distribution pattern. This observation suggests that the regression model satisfies the assumption of normality. In the heteroscedasticity test, the distribution of points exhibits a lack of discernible pattern, as they are observed to be randomly dispersed both above and below the 0 axis on the Y axis. Thus, based on the available information, there is a lack of heteroscedasticity, leading to the acceptance of the null hypothesis (H0).

The use of Pearson correlation analysis illustrates the magnitude of the association between variables and the level of correlation between the independent variable (X) and the dependent variable (Y).

Based on the examination of the correlation coefficient utilizing the Product Moment method, it has been determined that the correlation coefficient measures 0.840, which is within the range of 0.80 to 1.000. The observation above suggests a significant impact of the accounting information system (variable X) on internal accounts receivable control (Y) management.

Simple linear regression analysis is used to find out how much influence variable X (Accounting Information System) has on variable Y (Internal Control of Receivables).

From the calculation results it can be seen that the regression equation is as follows:

Y = a + bx

Y = 7.180 + 0,730X

Where:

X = Receivables Accounting Information System

Y = Internal Control of Receivables

Based on the calculations, it is evident that the regression coefficient parameter (0.730) associated with the independent variable has a positive relationship. This finding suggests a favorable correlation between the accounting information system and the internal control of accounts receivable. Therefore, it can be observed that for every incremental enhancement in the accounting information system, the internal control mechanism for accounts receivable will encounter a corresponding rise of 0.730 units.

The calculated coefficient of determination (R^2) is 70.6%. The R Square value can be regarded as the coefficient of determination, indicating that the independent variables in this particular analysis can explain 70.6% of the variance in the dependent variable. The findings of this study indicate that the accounting information system has a significant impact of 70.6% on the control of internal accounts receivable. However, it is essential to note that other elements, such as business rules, were not considered in this research and may account for the remaining 29.4% of influence.

Based on the empirical tests undertaken, it can be deduced that the organization's implementation of the accounting information system exerts an influence on the control of internal accounts receivable. The considerable influence between the accounting information system (variable X) and internal accounts receivable control (variable Y) is apparent based on the correlation coefficient.

The close correlation between the accounting information system and effective internal control has been demonstrated in prior research conducted by Teru, Idoku, and Ndeyati (2017), Alawaqleh (2021), Kocsis (2019), and Li, Dai, Gershberg, and Vasarhelyi (2018). These studies highlight the significance of this relationship as a means for management to achieve a competitive advantage in the business realm.

This statement is consistent with the argument by Turner, Weickgenannt, and Copeland

(2022) that an effectively designed accounting information system plays a crucial role in attaining control objectives. The establishment of a comprehensive accounting information system, complemented by robust internal control mechanisms, functions as a mechanism through which management may monitor the organization's performance and facilitate seamless operations.

## CONCLUSION

The accounting information system is rated as "Fairly Good" in its respective category on average. The internal control system for accounts receivable is also classified as "Fairly Good." The correlation coefficient analysis derived from the processed data indicates a significant and robust association between the accounting information system and internal accounts receivable control. The data analysis about the coefficient of simple linear regression suggests that when the value of X (Accounting Information System) is zero and then grows by one unit, there would be a corresponding impact or increase in Y (Internal Accounts Receivable Control).

To optimize the accounting information system, it is imperative to implement measures such as conducting regular training sessions for all pertinent stakeholders in the case of modifications to the accounting information system. This condition will enable staff to acclimatize to the changes swiftly. The accounting information system has a significant role in shaping internal accounts receivable control, emphasizing the need for a robust accounting information system to establish compelling internal accounts receivable control. If a firm employs an insufficient accounts receivable accounting information system and lacks effective internal control, it will encounter financial losses.

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