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Understanding Information Effectiveness in Hospitality Accounting Information Systems: Evidence from the Roles of System Quality, Data Accuracy, and AIS Users

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ABSTRACT

Accounting Information Systems (AIS) play an increasingly important role in supporting financial decision making in the hospitality industry, where operational activities require timely and reliable accounting information. However, the effectiveness of accounting information largely depends on the interaction between technological and informational factors. This study examines the effects of AIS users, data accuracy, and system quality on information effectiveness in hospitality organizations in Indonesia. A quantitative research design was employed using a census approach involving 100 accounting and finance employees. Data were collected through structured questionnaires and analyzed using multiple linear regression. The findings reveal that data accuracy and system quality have positive and significant effects on information effectiveness, whereas AIS users do not have a significant direct influence. Simultaneously, all independent variables significantly explain variations in information effectiveness. These findings extend the Information Systems Success Model by emphasizing the strategic importance of data quality and system performance in enhancing accounting information effectiveness within hospitality organizations. Practically, the study suggests that hospitality managers should strengthen data governance, improve system reliability, and continuously optimize AIS implementation to support more effective managerial decision making. This study contributes empirical evidence from an emerging economy and provides insights for future AIS development in the hospitality sector.

Keywords: Accounting Information Systems, Information Effectiveness, Data Accuracy, System Quality, Hospitality Industry.

JEL Code: M41, M15, L83, C12, D83

I. Introduction

The rapid digital transformation of the hospitality industry has significantly increased organizational dependence on Accounting Information Systems (AIS) for financial reporting, operational control, and managerial decision making. Despite substantial investments in digital accounting technologies, many hospitality organizations continue to experience ineffective information delivery, inconsistent financial reporting quality, and delays in managerial decision-making. These problems are frequently associated with inaccurate accounting data, variations in system quality, and differences in user capabilities. Consequently,



organizations often fail to obtain reliable accounting information that fully supports strategic and operational decisions. Although previous studies have extensively examined the technological aspects of AIS, relatively little attention has been devoted to understanding how system quality, data accuracy, and AIS users collectively influence information effectiveness, particularly within hospitality organizations operating in emerging economies such as Indonesia. This unresolved issue constitutes the primary research problem addressed in this study.

The hospitality industry has evolved into a highly competitive and data-intensive sector where operational efficiency and strategic decision-making are increasingly dependent on the effectiveness of accounting information systems (AIS). Recent digital transformation has fundamentally reshaped accounting practices in hospitality organizations, requiring accounting information systems to deliver integrated, real-time, and decision-oriented financial information. In emerging economies, organizations increasingly rely on AIS to improve financial transparency, operational efficiency, and organizational resilience under rapidly changing business environments. As tourism continues to expand globally, hotels are required to manage complex financial transactions, occupancy data, and service-related expenditures in real time, thereby positioning AIS as a critical infrastructure for organizational sustainability (Ivanov & Webster, 2021; Buhalis & Leung, 2023). In this context, AIS is not merely a reporting mechanism but a strategic tool that integrates financial processes, supports managerial control, and enhances organizational performance through timely and accurate information delivery (Romney & Steinbart, 2021; Grande et al., 2022). The effectiveness of AIS becomes particularly crucial in hospitality settings, where decision-making is highly dynamic and customer-driven, requiring real-time insights into revenue streams and cost structures (Sigala, 2020; Law et al., 2022). However, despite technological advancements, many hospitality organizations still face challenges in translating system outputs into actionable insights, indicating a gap between system quality and information effectiveness. This issue is often exacerbated by variations in system implementation, user competencies, and data management practices across different hotel organizations (Susanto, 2013; Mulyadi, 2016). Consequently, the ability of AIS to deliver effective information is not solely determined by system sophistication but also by how users interact with the system and how accurately data is processed. This highlights the need to reassess AIS effectiveness from a more integrative perspective that includes human and informational dimensions.

Recent studies emphasize that digital transformation in hospitality must go beyond automation and focus on enhancing data-driven decision-making capabilities (Kitsios & Kamariotou, 2021). Therefore, understanding the interplay between system quality, user roles, and data accuracy is essential to advancing AIS effectiveness in the hospitality industry. Despite the growing body of literature on AIS, a critical gap remains in understanding how system quality translates into effective information delivery within hospitality contexts. Existing studies tend to focus on technological attributes such as system reliability, integration, and usability, often overlooking the behavioral and informational factors that mediate these relationships (Grande et al., 2022; Al-Hiyari et al., 2023). In particular, the role of AIS users as interpreters and executors of accounting processes has received limited empirical attention, even though user competence significantly influences how information is processed and communicated (Bodnar & Hopwood, 2014; Al-Dmour et al., 2021). Moreover, data accuracy—referred to as the correctness and reliability of processed information—has often been treated as a technical outcome rather than a strategic variable affecting decision quality (Krismiaji, 2015; Mardi, 2014). This oversight is problematic because inaccurate data can distort financial reporting, mislead stakeholders, and ultimately compromise organizational performance. The hospitality industry, characterized by high transaction volumes and operational complexity, is particularly vulnerable to such risks. Additionally, prior research has not sufficiently explored the combined effects of system quality, user roles, and data accuracy in shaping information effectiveness, leaving a conceptual and empirical gap in AIS research. This gap is further widened by the lack of contextual studies focusing on developing economies, including Indonesia, where hospitality systems often exhibit heterogeneous implementation practices. Therefore, a more comprehensive approach is needed to unpack the mechanisms through which AIS variables interact to influence information effectiveness. Existing studies predominantly investigate system quality, information

quality, or user satisfaction as separate constructs. Consequently, limited empirical evidence explains how these dimensions jointly contribute to information effectiveness in hospitality accounting systems. Furthermore, studies conducted in emerging economies remain relatively scarce, despite differences in digital maturity, organizational capabilities, and accounting practices. Therefore, this study addresses both conceptual and contextual gaps by integrating AIS users, data accuracy, and system quality into a single empirical model within the Indonesian hospitality industry.

Although the implementation of accounting information systems has significantly increased across Indonesian organizations, many hospitality companies continue to experience challenges related to inconsistent data quality, limited system integration, and differences in user capability. These issues reduce the ability of AIS to generate reliable accounting information that effectively supports managerial decision making.. This research is increasingly relevant because hospitality organizations are accelerating digital transformation while simultaneously facing greater demands for transparent financial reporting, operational efficiency, and evidence-based managerial decision making. Understanding the determinants of information effectiveness is therefore essential for improving organizational competitiveness and financial sustainability. The urgency of this research lies in both its academic relevance and practical implications for the hospitality industry. From an academic perspective, this study contributes to the ongoing discourse on information systems by integrating technological, human, and informational dimensions into a unified analytical framework (DeLone & McLean, 2020; Tarhini et al., 2021). Such integration is essential to advancing theoretical models of AIS effectiveness, which have traditionally been fragmented across different research streams. From a practical standpoint, ineffective AIS can lead to poor financial decisions, reduced operational efficiency, and diminished competitive advantage, particularly in the hospitality sector where margins are often tight and customer expectations are high (Buhalis & Leung, 2023). Furthermore, the increasing reliance on digital systems in hospitality operations amplifies the consequences of information inaccuracies and user-related inefficiencies. Organizations must therefore ensure not only the quality of their systems but also the competence of their users and the accuracy of their data inputs. In the Indonesian context, where hospitality businesses vary significantly in terms of technological adoption, these challenges are even more pronounced. Addressing these issues is critical to enhancing organizational resilience and long-term sustainability. Consequently, this study responds to an urgent need to identify the key determinants of AIS effectiveness and provide actionable insights for improving information delivery in hospitality settings.

Unlike previous studies that primarily emphasize technological quality or user satisfaction independently, this study develops an integrated analytical framework that simultaneously evaluates technological quality, data integrity, and human interaction in explaining information effectiveness. This integrated perspective provides a more comprehensive explanation of AIS effectiveness in hospitality organizations operating within emerging market environments. Recent empirical studies mainly investigate system quality, user satisfaction, or information quality separately. However, limited studies simultaneously evaluate the combined effects of AIS users, data accuracy, and system quality on information effectiveness within hospitality organizations. This study addresses that gap by developing an integrated analytical framework that reflects technological, informational, and behavioral dimensions simultaneously. The primary objective of this study is to examine how system quality influences information effectiveness through the mediating roles of AIS users and data accuracy in hospitality accounting systems. Specifically, the study seeks to analyze the extent to which user competence and data accuracy contribute to the effective delivery of accounting information, thereby bridging the gap between system inputs and decision-making outputs. By focusing on these variables, the study aims to provide a more nuanced understanding of AIS effectiveness that goes beyond traditional system-centric perspectives. Additionally, the research investigates whether improvements in system quality alone are sufficient to enhance information effectiveness, or whether complementary factors such as user engagement and data integrity are required. This objective aligns with the broader goal of identifying strategic levers that can optimize AIS performance in hospitality organizations. The study also aims to empirically validate the relationships between these variables using quantitative methods, thereby contributing to evidence-based decision-making in AIS implementation. Furthermore, the

research provides insights into how hospitality organizations can leverage their existing systems more effectively by addressing user and data-related challenges. Ultimately, the study seeks to develop a comprehensive framework that explains how system quality translates into actionable information within hospitality contexts.

This article contributes to the development of knowledge in several significant ways. First, it extends the theoretical understanding of AIS effectiveness by integrating system quality, user roles, and data accuracy into a single analytical model, thereby offering a more holistic perspective on information systems performance (DeLone & McLean, 2020; Al-Dmour et al., 2021). Second, it provides empirical evidence from the hospitality industry in Indonesia, contributing to the limited body of research in emerging market contexts. Third, the study highlights the strategic importance of AIS users, demonstrating that human factors play a critical role in determining the effectiveness of information delivery. Fourth, it repositions data accuracy as a central variable in AIS research, emphasizing its impact on decision-making quality and organizational outcomes. Fifth, the findings offer practical implications for hospitality managers, suggesting that investments in system quality must be complemented by user training and data management practices. Sixth, the study contributes to methodological advancements by employing a quantitative approach that allows for robust hypothesis testing and generalizable findings. Seventh, it provides a foundation for future research on AIS effectiveness by identifying key variables and relationships that warrant further investigation. Finally, the article bridges the gap between theory and practice, offering actionable insights that can enhance the performance of hospitality accounting systems in real-world settings.

II. Literature Review and Hypothesis Development

The theoretical foundation of this study is rooted in the integration of Information Systems Success Model (DeLone & McLean, 2020) and Contingency Theory, which collectively explain how system performance is influenced by technological, human, and organizational factors. The DeLone and McLean model emphasizes that system quality, information quality, and user satisfaction determine the success of information systems in organizational contexts (DeLone & McLean, 2020). Within this framework, system quality refers to the reliability, usability, and integration of the accounting information system, while information effectiveness reflects the extent to which system outputs support decision-making processes. Contingency Theory further complements this perspective by asserting that the effectiveness of a system depends on the alignment between technology, users, and organizational needs (Otley, 2016; Al-Dmour et al., 2021). In hospitality organizations, where operational decisions are highly dynamic, AIS must adapt to contextual factors such as transaction complexity and user competencies. The integration of these theories provides a comprehensive lens for understanding how AIS effectiveness emerges from the interaction of system attributes and human factors. Moreover, recent studies emphasize that digital transformation has shifted AIS from a transactional system to a strategic decision-support tool (Buhalis & Leung, 2023). This shift necessitates a re-evaluation of AIS effectiveness beyond technical performance, incorporating behavioral and informational dimensions. Consequently, this study adopts a multidimensional perspective that captures the interplay between system quality, user roles, and data accuracy. Such an approach aligns with contemporary research trends that advocate for holistic models of information system performance (Tarhini et al., 2021). Therefore, the theoretical grounding of this study reflects both classical and modern perspectives in AIS research.

The first key variable in this study is Accounting Information System Users, which represents the human component responsible for processing, interpreting, and communicating financial information. According to Susanto (2013), AIS users are organizational actors who execute accounting procedures and translate system outputs into meaningful reports. Similarly, Bodnar and Hopwood (2014) define AIS users as individuals who transform financial data into information for decision-making purposes. These definitions highlight the critical role of users as intermediaries between system inputs and outputs. In contemporary research, user competence, experience, and engagement have been identified as significant determinants of system effectiveness (Al-Dmour et al., 2021; Grande et al., 2022). In the hospitality sector, where financial

operations involve multiple departments, the role of AIS users becomes even more complex. Users must not only understand accounting principles but also adapt to system functionalities and organizational workflows. Furthermore, user errors or misinterpretations can lead to inaccurate reporting and ineffective information delivery. Recent studies suggest that user training and digital literacy are essential for maximizing AIS performance (Kitsios & Kamariotou, 2021). Therefore, AIS users are not passive actors but active contributors to system effectiveness. Their role is particularly important in ensuring that information is communicated accurately and timely. This study positions AIS users as a strategic variable influencing information effectiveness.

The second variable is Data Accuracy, which refers to the correctness, reliability, and validity of information generated by the system. Krismiaji (2015) defines data accuracy as the degree to which processed information reflects actual conditions and can be used as a basis for decision-making. Mardi (2014) further emphasizes that accurate financial information must be transparent and accountable to support organizational planning and control. In modern AIS research, data accuracy is considered a critical component of information quality, directly affecting decision-making effectiveness (Al-Hiyari et al., 2023; Tarhini et al., 2021). In the hospitality industry, inaccurate data can lead to mispricing, incorrect occupancy forecasting, and financial mismanagement. This risk is amplified by the high volume of transactions and the need for real-time reporting. Moreover, data accuracy is not solely determined by system capabilities but also by user input and data management practices. Errors in data entry, processing, or interpretation can compromise the integrity of information outputs. Recent studies highlight the importance of data governance and validation mechanisms in ensuring data accuracy (Grande et al., 2022). Therefore, data accuracy is both a technical and behavioral construct that influences AIS effectiveness. This study treats data accuracy as a key determinant of information effectiveness.

The third variable is System Quality, which represents the technical performance of the accounting information system. Mulyadi (2016) defines system quality as the integration of various components, including hardware, software, procedures, and databases, that collectively produce reliable information. Susanto (2013) further explains that system quality depends on the alignment of these components to ensure smooth information processing. In contemporary literature, system quality is associated with attributes such as reliability, flexibility, usability, and integration (DeLone & McLean, 2020; Buhalis & Leung, 2023). In the hospitality context, system quality determines how efficiently financial transactions are recorded, processed, and reported. High-quality systems enable real-time data processing, reduce errors, and enhance decision-making capabilities. However, system quality alone does not guarantee information effectiveness if users are unable to utilize the system effectively or if data inputs are inaccurate. This highlights the need to consider system quality in conjunction with human and informational factors. Recent studies emphasize that system quality must be complemented by user competence and data integrity to achieve optimal performance (Al-Dmour et al., 2021). Therefore, system quality is a necessary but not sufficient condition for AIS effectiveness. This study examines how system quality interacts with other variables to influence information effectiveness.

The dependent variable in this study is Information Effectiveness, which refers to the ability of AIS to deliver accurate, timely, and relevant information for decision-making. Mulyadi (2016) states that effective information delivery is essential for understanding organizational performance over time. Romney and Steinbart (2021) define AIS effectiveness as the system's ability to provide reliable information that reflects actual conditions. In the hospitality industry, information effectiveness is critical for managing revenue, costs, and operational efficiency. Effective AIS enables managers to make informed decisions regarding pricing, budgeting, and resource allocation. However, ineffective information delivery can lead to poor decision-making and reduced organizational performance. Recent studies highlight that information effectiveness is influenced by multiple factors, including system quality, user competence, and data accuracy (Grande et al., 2022; Al-Hiyari et al., 2023). Therefore, information effectiveness is a multidimensional construct that reflects the overall performance of AIS. This study conceptualizes information effectiveness as the outcome of interactions between system, user, and data variables. Understanding these interactions is essential for improving AIS performance in hospitality organizations.

Several empirical studies have examined the relationship between AIS variables and organizational performance. Grande et al. (2022), published in the International Journal of Accounting Information Systems, used a quantitative approach and found that system quality significantly improves decision-making effectiveness. Al-Dmour et al. (2021), in the Journal of Enterprise Information Management, employed structural equation modeling and reported that AIS usage positively affects organizational performance through user engagement. Al-Hiyari et al. (2023), published in Information Systems Frontiers, found that information quality mediates the relationship between system quality and decision-making outcomes. Kitsios and Kamariotou (2021), in Sustainability, demonstrated that digital transformation enhances AIS performance by improving user capabilities. Tarhini et al. (2021), in Information Technology & People, found that user satisfaction significantly influences system effectiveness. Buhalis and Leung (2023), in Tourism Management, emphasized the role of digital technologies in improving information delivery in hospitality. Ivanov and Webster (2021), in Tourism Economics, highlighted the importance of AIS in supporting strategic decisions. These studies collectively indicate that AIS effectiveness is influenced by both technical and human factors. However, they often examine these variables in isolation rather than in an integrated framework. This limitation underscores the need for a more comprehensive analysis of AIS effectiveness.

Despite the extensive literature on AIS, several gaps remain in both theoretical and empirical research. First, existing studies tend to focus on system quality and information quality, often neglecting the role of users as active contributors to system effectiveness. Second, data accuracy is frequently treated as a technical outcome rather than a strategic variable influencing decision-making. Third, most studies examine the direct effects of AIS variables without exploring their interactive relationships. Fourth, there is limited research on AIS effectiveness in the hospitality industry, particularly in developing countries such as Indonesia. Fifth, previous studies often use fragmented models that fail to capture the complexity of AIS performance. Sixth, there is a lack of empirical evidence on how system quality translates into information effectiveness through mediating variables. Seventh, the integration of technological, human, and informational dimensions remains underexplored in AIS research. These gaps highlight the need for a comprehensive model that incorporates multiple variables and their interactions. This study addresses these gaps by integrating system quality, AIS users, and data accuracy into a unified framework. By doing so, it provides a more holistic understanding of AIS effectiveness. This approach contributes to both theoretical development and practical application.

This study offers a significant contribution to the literature by addressing the identified gaps and advancing the understanding of AIS effectiveness. It integrates multiple theoretical perspectives to develop a comprehensive framework that explains how system quality influences information effectiveness. It also highlights the strategic role of AIS users and data accuracy in enhancing system performance. Furthermore, the study provides empirical evidence from the hospitality industry in Indonesia, contributing to the limited body of research in this context. The findings are expected to offer practical insights for managers seeking to improve AIS effectiveness. By focusing on the interaction between system, user, and data variables, the study provides a more nuanced understanding of AIS performance. It also contributes to methodological advancements by employing a quantitative approach. Additionally, the study aligns with contemporary research trends that emphasize the importance of digital transformation. The integration of multiple variables into a single model represents a novel contribution to AIS research. This study therefore complements and extends previous research in meaningful ways. It provides a foundation for future studies on AIS effectiveness.

H1: AIS Users have a significant effect on Information Effectiveness

H2: Data Accuracy has a significant effect on Information Effectiveness

H3: System Quality has a significant effect on Information Effectiveness

H4: AIS Users, Data Accuracy, and System Quality simultaneously influence Information Effectiveness

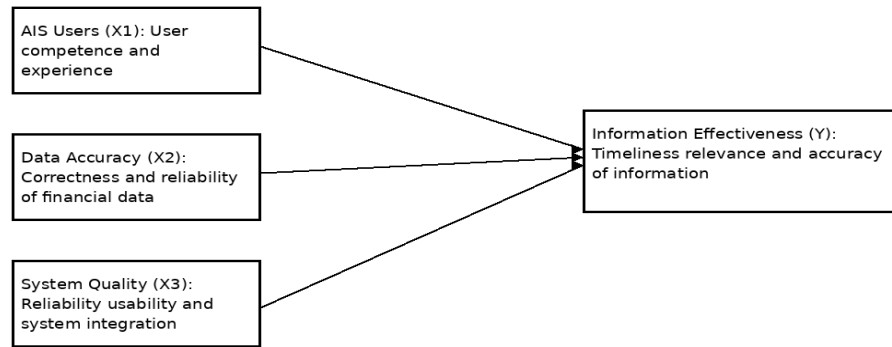


Figure 1. Conceptual Framework Model

III. Research Method

This study adopts a quantitative research approach with a descriptive design to examine the relationships between accounting information system (AIS) users, data accuracy, system quality, and information effectiveness within the hospitality industry. The quantitative approach was selected due to its ability to objectively measure variables and test hypotheses through statistical analysis, enabling the identification of causal relationships among constructs (Hardani, 2020). The descriptive nature of the study allows for a systematic explanation of the observed phenomena, particularly in understanding how AIS components influence the effectiveness of information delivery. This approach is appropriate for capturing empirical evidence from respondents and translating it into measurable outcomes that reflect organizational realities. Furthermore, the study is grounded in a positivist paradigm, where knowledge is derived from observable and quantifiable data. By employing this design, the research ensures objectivity, reliability, and generalizability of findings. The use of structured instruments also facilitates consistency in data collection. In addition, this approach aligns with prior AIS studies that emphasize statistical modeling in evaluating system performance. Therefore, the selected research design provides a robust framework for analyzing the effectiveness of accounting information systems. It also supports the development of evidence-based conclusions relevant to the hospitality sector.

The study was conducted within the hospitality industry in Indonesia, focusing specifically on employees working in accounting and finance departments across several hotel organizations. The data collection process was carried out within a single research period, during which respondents were asked to provide information regarding their experiences and perceptions related to AIS usage. The selection of this setting is justified by the dynamic nature of financial transactions in hospitality operations, which require efficient and accurate information systems. The timing of the research was aligned with operational conditions that allowed respondents to provide reliable and relevant data. Data were collected using a structured questionnaire distributed directly to respondents, ensuring a high response rate and data accuracy. The use of questionnaires enabled the researcher to gather standardized data across different organizations. Additionally, this method supports the collection of quantitative data suitable for statistical analysis. The research context reflects real-world conditions in the hospitality sector, enhancing the external validity of the study. By focusing on accounting and finance personnel, the study ensures that respondents possess relevant knowledge and experience in AIS. This strengthens the reliability of the data collected.

The sampling technique employed in this study is the census method, where all members of the population are included as research respondents. This approach was chosen because the population size is relatively small and manageable, allowing for complete coverage without the need for sampling reduction (Zamzam, 2018). The census method ensures that the data collected represent the entire population, thereby

minimizing sampling bias. It also enhances the accuracy and reliability of the findings, as all relevant perspectives are captured. In this study, the population consists of employees working in accounting and finance departments within several hospitality organizations in Indonesia. The total population comprises 100 individuals, all of whom were included as respondents. The use of a census approach eliminates the risk of excluding important data points that may influence the results. Furthermore, it allows for a more comprehensive analysis of the relationships between variables. This method is particularly suitable for studies with a limited population size. By including all population members, the study achieves a higher level of precision in its findings. Therefore, the census method is appropriate for the research objectives and context. The respondents consisted of accounting and finance personnel employed in hospitality organizations in Indonesia. These employees were selected because they are directly involved in financial recording, transaction processing, reporting activities, and the operation of accounting information systems. Their professional responsibilities ensure that they possess sufficient knowledge and practical experience to evaluate system quality, data accuracy, and information effectiveness. The respondents represented various organizational positions, educational backgrounds, and lengths of professional experience, thereby providing diverse perspectives regarding AIS implementation.

Data collection was conducted through a structured self-administered questionnaire distributed directly to respondents after obtaining organizational permission. Prior to the main survey, the questionnaire was reviewed to ensure clarity, readability, and content appropriateness. Respondents participated voluntarily and were informed that all responses would remain confidential and be used solely for academic purposes. Completed questionnaires were screened to ensure completeness before statistical analysis was performed. The data collection method utilized in this study involves the distribution of structured questionnaires directly to respondents. The questionnaire was designed to measure variables related to AIS users, data accuracy, system quality, and information effectiveness using standardized indicators. Each item in the questionnaire was developed based on established theories and previous studies to ensure content validity. Respondents were asked to provide their perceptions using a Likert scale, allowing for quantitative analysis of responses. The use of structured questionnaires ensures consistency in data collection across different respondents. It also facilitates the measurement of latent variables through observable indicators. Prior to distribution, the questionnaire was reviewed to ensure clarity and relevance. This step is important to minimize potential misunderstandings among respondents. The data collected through this method provide a reliable basis for statistical analysis. Additionally, the questionnaire approach is widely used in AIS research due to its efficiency and effectiveness. Therefore, this method is suitable for capturing the required data in this study. The analytical technique employed in this study is multiple linear regression analysis, which is used to examine the influence of independent variables on the dependent variable. This technique allows for the identification of both individual and simultaneous effects of AIS users, data accuracy, and system quality on information effectiveness. Instrument quality was evaluated through validity and reliability testing. Item validity was assessed using corrected item-total correlation, while internal consistency was examined using Cronbach's Alpha coefficient. A Cronbach's Alpha value greater than 0.70 was considered acceptable, indicating satisfactory reliability. These procedures ensured that all constructs were measured consistently before hypothesis testing.

The regression model is formulated to estimate the relationship between variables and determine their statistical significance. Multiple linear regression analysis was selected because the research model examines the simultaneous and partial effects of several independent variables on a single dependent variable. Prior to hypothesis testing, classical assumption tests including normality, multicollinearity, and heteroscedasticity were performed to ensure compliance with regression assumptions. Subsequently, regression coefficients, t-tests, F-tests, and the coefficient of determination (R^2) were estimated using SPSS software. In addition to regression analysis, the study also utilizes the coefficient of determination (R^2) to assess the explanatory power of the model. Hypothesis testing is conducted using both partial (t-test) and simultaneous (F-test) analyses to evaluate the significance of relationships. The use of these statistical techniques enables a comprehensive understanding of variable interactions. Data processing and analysis

were conducted using SPSS software, which provides reliable and accurate statistical outputs. This approach ensures that the findings are based on rigorous analytical procedures. Furthermore, the use of regression analysis is consistent with prior studies in AIS research. Therefore, the selected analytical methods are appropriate for achieving the research objectives. Overall, the methodological framework of this study is designed to ensure the validity, reliability, and robustness of the findings. The integration of quantitative design, census sampling, structured questionnaires, and statistical analysis provides a comprehensive approach to examining AIS effectiveness. Each methodological component is aligned with the research objectives and theoretical framework. The use of established references further strengthens the credibility of the methodology. Additionally, the research design allows for replication in similar contexts, enhancing its generalizability. The combination of descriptive and analytical techniques ensures that both patterns and relationships are captured. This methodological rigor contributes to the reliability of the results. By employing a systematic approach, the study provides a solid foundation for empirical analysis. The methodology also supports the development of practical implications for the hospitality industry. Therefore, the research design is well-suited to address the research problem effectively.

IV. Result and Discussion

4.1. Analysis Result

The data quality assessment indicates that all measurement instruments used in this study meet the required validity and reliability standards. The validity test results demonstrate that all questionnaire items have correlation values exceeding the critical threshold, confirming that each item appropriately measures the intended construct. In addition, the reliability test shows that all variables achieve Cronbach's Alpha values greater than 0.70, indicating a high level of internal consistency. These findings confirm that the data are suitable for further statistical analysis. The robustness of the measurement model ensures that the subsequent analysis accurately reflects the relationships between AIS users, data accuracy, system quality, and information effectiveness. Moreover, the use of validated instruments enhances the credibility of the empirical findings. The consistency of responses across respondents further strengthens the reliability of the dataset. Therefore, the dataset provides a strong foundation for inferential statistical testing. The validation results confirm that the constructs are measured with sufficient accuracy. This supports the reliability of the conclusions drawn from the analysis. The classical assumption tests were conducted to ensure that the regression model satisfies the necessary statistical requirements. The normality test results indicate that the data are normally distributed, as evidenced by the distribution pattern that follows the expected normal curve. The multicollinearity test shows that all independent variables have tolerance values above 0.10 and variance inflation factor (VIF) values below 10, indicating the absence of multicollinearity. This suggests that the independent variables are not highly correlated with each other and can be used simultaneously in the regression model. Furthermore, the heteroscedasticity test results reveal no significant variance inconsistencies, indicating that the residuals are homoscedastic. These findings confirm that the regression model meets the classical assumptions required for reliable estimation. The absence of statistical violations ensures that the regression coefficients are unbiased and efficient

Table 1. The Multiple Linear Regression Analysis

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6,440	7.471		2.72	0.003		
	X1 (AIS users)	-0.251	0.215	-0.351	-1.235	0.365	0.914	1.742

X2 (Data accuracy)	0.228	0.205	0.322	2.412	0.001	0.94	1.754
X3 (System quality)	0.066	0.53	0.37	2.16	0	0.872	1.722
a. Dependent Variable: Y							

The results of the multiple linear regression analysis reveal the relationship between the independent variables and information effectiveness. The regression equation is expressed as:

$$Y = 6.440 - 0.251X_1 + 0.228X_2 + 0.066X_3.$$

The coefficient for AIS users (X1) is negative (-0.251), indicating that an increase in user-related factors does not necessarily improve the effectiveness of information delivery. This finding suggests that user involvement alone is insufficient to enhance system effectiveness without proper alignment with other variables. In contrast, data accuracy (X2) has a positive coefficient (0.228), demonstrating that accurate information significantly contributes to improved information effectiveness. Similarly, system quality (X3) shows a positive coefficient (0.066), indicating that better system performance enhances the effectiveness of information delivery. These results highlight the differential impact of each variable on the dependent variable. The regression model provides a quantitative representation of these relationships. The findings suggest that data accuracy and system quality play more critical roles compared to AIS users. This underscores the importance of reliable data and robust systems in achieving effective information delivery.

a. The Coefficient of Determination (R^2)

Table 2. The Coefficient Of Determination (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.742a	.764	.825	4.5455	.764	6.785	4	96	.000	2.064
a. Predictors: (Constant), X4, X2, X3, X1										
b. Dependent Variable: Y										

The coefficient of determination (R^2) analysis indicates that the independent variables collectively explain a substantial proportion of the variance in information effectiveness. The adjusted R^2 value of 0.825 suggests that 82.5% of the variation in information effectiveness is explained by AIS users, data accuracy, and system quality. The remaining 17.5% is influenced by other factors not included in the model. This high explanatory power indicates that the model is well-specified and captures the key determinants of information effectiveness. The results demonstrate that the selected variables are highly relevant in explaining the dependent variable. The strong R^2 value also reflects the robustness of the regression model. This finding is consistent with previous studies that highlight the importance of AIS components in organizational performance. The model's explanatory strength supports its use for predictive purposes. Furthermore, it indicates that improvements in these variables can significantly enhance information effectiveness. Therefore, the model provides valuable insights into the determinants of AIS effectiveness.

b. The simultaneous hypothesis test results:

Table 3. The Simultaneous Hypothesis Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	36.120	3	7.215	6.785	.000b

	Residual	2857.05	96	4.650		
	Total	2440.02	99			
a. Dependent Variable: Y						
b. Predictors: (Constant), X4, X2, X3, X1						

The simultaneous hypothesis test results, based on the F-test, indicate that the independent variables jointly have a significant effect on information effectiveness. The F-statistic value of 6.785 exceeds the critical value, with a significance level of 0.000, confirming that the model is statistically significant. This result demonstrates that AIS users, data accuracy, and system quality collectively influence the effectiveness of information delivery. The findings suggest that these variables should not be considered in isolation, as their combined effect is essential for improving AIS performance. The significance of the F-test supports the overall validity of the research model. It also confirms that the independent variables are relevant predictors of the dependent variable. The joint influence of these variables highlights the importance of an integrated approach to AIS management. This result aligns with theoretical expectations regarding system performance. Therefore, the simultaneous test provides strong evidence for the overall model.

c. The Partial Hypothesis Testing Results

Table 4. The Partial Hypothesis Testing Results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6,440	7.471		2.720	.003		
	X1 (AIS users)	-.251	.215	-.351	-1.235	.365	.914	1.742
	X2 (Data accuracy)	.228	.205	.322	2.412	.001	.940	1.754
	X3 (System quality)	.066	.530	.370	2.160	.000	.872	1.722
a. Dependent Variable: Y								

The partial hypothesis testing results, based on the t-test, provide further insights into the individual effects of each variable. The results indicate that data accuracy (X2) and system quality (X3) have positive and statistically significant effects on information effectiveness, as their t-values exceed the critical threshold of 1.661. In contrast, AIS users (X1) do not show a significant effect, as indicated by a t-value below the critical level. This finding suggests that the role of users may be indirect or dependent on other factors such as training and system design. The significance of data accuracy confirms its critical role in ensuring reliable decision-making. Similarly, the significance of system quality highlights the importance of technological performance in supporting information delivery. These results demonstrate that not all variables contribute equally to information effectiveness. The findings also indicate that improvements in system and data quality are more impactful than user-related factors alone. This emphasizes the need for a balanced approach to AIS development. Therefore, the partial test results provide a nuanced understanding of variable relationships. Overall, the statistical analysis confirms that information effectiveness in hospitality accounting systems is primarily influenced by data accuracy and system quality, while the role of AIS users is less direct. The results highlight the importance of ensuring accurate data processing and maintaining high system performance to achieve effective information delivery. The combination of validation tests, classical assumption tests, regression analysis, and hypothesis testing provides a comprehensive evaluation of the research model. The findings are consistent with the theoretical framework and empirical evidence presented in previous studies. The use of multiple statistical techniques strengthens the robustness of the results. Furthermore, the analysis demonstrates the interdependence of AIS components in determining system effectiveness. The results also provide practical insights for improving AIS performance in the hospitality

industry. By focusing on key determinants, organizations can enhance decision-making processes. Therefore, the findings contribute to both theoretical and practical advancements in AIS research.

4.2. Discussion

The findings of this study provide important insights into the determinants of information effectiveness in hospitality accounting information systems, particularly in relation to AIS users, data accuracy, and system quality. The empirical results indicate that not all variables contribute equally to enhancing information effectiveness, suggesting the need for a more nuanced understanding of how AIS components interact in organizational contexts. The regression results demonstrate that data accuracy and system quality play dominant roles, while the influence of AIS users is statistically insignificant. These findings highlight the complexity of AIS effectiveness, where technological and informational dimensions may outweigh human factors under certain conditions. The results are consistent with the Information Systems Success Model, which emphasizes the importance of system and information quality in determining system outcomes (DeLone & McLean, 2020). At the same time, the findings challenge traditional assumptions that user involvement alone guarantees system effectiveness. This suggests that user contributions must be supported by accurate data and reliable systems to generate meaningful outcomes. In the hospitality industry, where operational decisions are highly dependent on real-time financial data, the accuracy and quality of information become critical success factors. Therefore, the discussion focuses on the interpretation of each hypothesis in relation to theoretical and empirical evidence. This approach allows for a comprehensive understanding of the research findings. It also provides a basis for deriving practical implications. The results of hypothesis testing indicate that H1, which posits that AIS users have a significant effect on information effectiveness, is not supported. The negative and insignificant coefficient suggests that improvements in user-related factors do not necessarily lead to better information delivery. This finding implies that user competence alone is insufficient to enhance AIS effectiveness without adequate system support and data integrity. According to Susanto (2013), AIS users are responsible for translating financial data into meaningful information, but their effectiveness depends on the quality of system outputs. Similarly, Bodnar and Hopwood (2014) emphasize that users act as intermediaries rather than primary determinants of system performance. The insignificant effect observed in this study may be attributed to variations in user skills, lack of training, or inconsistencies in system usage across organizations.

The hospitality sector often relies on standardized systems that limit user discretion, reducing the direct impact of users on information outcomes. This finding aligns with recent studies suggesting that user influence is mediated by system and data factors (Al-Dmour et al., 2021). Therefore, the role of AIS users may be indirect rather than direct. The results highlight the need to enhance user training and system integration simultaneously. This finding contributes to the literature by questioning the dominant role traditionally attributed to users in AIS effectiveness. The insignificant relationship between AIS users and information effectiveness suggests that individual user involvement alone does not guarantee high-quality accounting information. In highly standardized hospitality accounting environments, organizational procedures and system automation often reduce the direct influence of individual users on reporting outcomes. This finding supports Contingency Theory, which argues that organizational performance depends on the alignment between technology, organizational context, and human capabilities rather than individual competencies alone (Otley, 2016). It also indicates that investments in employee training should be accompanied by improvements in system functionality and data governance to maximize information effectiveness.

In contrast, H2, which states that data accuracy has a significant effect on information effectiveness, is supported. The positive and significant coefficient confirms that accurate data is a critical determinant of effective information delivery. This finding is consistent with the definition of data accuracy as the correctness and reliability of processed information (Krismiaji, 2015). Mardi (2014) also emphasizes that accurate information is essential for transparent and accountable decision-making. In the hospitality industry, accurate financial data enables managers to make informed decisions regarding pricing, budgeting, and operational

planning. The results suggest that even the most advanced systems cannot produce effective information if the underlying data is inaccurate. This finding reinforces the importance of data validation and governance mechanisms in AIS. It also aligns with recent studies that identify data quality as a key driver of system effectiveness (Al-Hiyari et al., 2023; Grande et al., 2022). Furthermore, the strong effect of data accuracy highlights its role as a foundational element in AIS performance. Organizations must therefore prioritize data integrity to enhance decision-making outcomes. This finding contributes to the literature by emphasizing the strategic importance of data accuracy. It also provides practical implications for improving AIS effectiveness. The significant influence of data accuracy demonstrates that information effectiveness fundamentally depends on the quality of accounting data entering the system. High-quality accounting information cannot be generated when source data contain errors, inconsistencies, or incomplete records. This finding reinforces the Information Quality dimension of the Information Systems Success Model, emphasizing that reliable accounting information forms the basis of effective managerial decision making. It also supports previous empirical evidence reported by Al-Hiyari et al. (2023) and Grande et al. (2022), who identified data quality as one of the strongest predictors of AIS performance.

The results also confirm that H3, which proposes that system quality has a significant effect on information effectiveness, is supported. The positive coefficient indicates that higher system quality leads to improved information delivery. This finding is consistent with Mulyadi (2016), who defines system quality as the integration of components that produce reliable information. Susanto (2013) further highlights the importance of system integration in ensuring effective information processing. In modern AIS research, system quality is associated with attributes such as reliability, usability, and flexibility (DeLone & McLean, 2020). The findings suggest that high-quality systems enable efficient data processing and reduce errors, thereby enhancing information effectiveness. In the hospitality context, system quality is particularly important due to the complexity of financial transactions and the need for real-time reporting. The results also align with previous studies that emphasize the role of system quality in improving organizational performance (Grande et al., 2022). However, the relatively smaller coefficient compared to data accuracy suggests that system quality alone is not sufficient. It must be complemented by accurate data to achieve optimal outcomes. This finding underscores the interdependence of system and data factors. Therefore, system quality remains a critical determinant of AIS effectiveness. System quality significantly improves information effectiveness because reliable, integrated, and user-friendly accounting systems facilitate timely financial reporting and reduce processing errors. This result confirms that technological infrastructure remains a critical organizational resource supporting operational efficiency. Consistent with DeLone and McLean (2020), high system quality enhances both information quality and organizational decision support. The finding also demonstrates that hospitality organizations should continuously modernize their accounting systems to maintain competitive performance in increasingly digital business environments.

The simultaneous test results provide strong support for H4, which states that AIS users, data accuracy, and system quality collectively influence information effectiveness. The significant F-test indicates that the combined effect of these variables is substantial, even though their individual contributions differ. This finding highlights the importance of adopting an integrated approach to AIS management. While data accuracy and system quality have stronger individual effects, the inclusion of user factors enhances the overall explanatory power of the model. This result is consistent with Contingency Theory, which emphasizes the need for alignment between technology, users, and organizational context (Otley, 2016). It also supports the Information Systems Success Model, which considers multiple dimensions of system performance (DeLone & McLean, 2020). The findings suggest that AIS effectiveness cannot be achieved by focusing on a single variable. Instead, organizations must ensure the alignment of system capabilities, data integrity, and user competencies. This integrated perspective provides a more comprehensive understanding of AIS performance. It also highlights the complexity of managing information systems in the hospitality industry. Therefore, the simultaneous effect of variables is crucial for achieving effective information delivery. The simultaneous significance of AIS users, data accuracy, and system quality indicates that information effectiveness is determined by the interaction of technological, informational, and human dimensions rather

than by a single organizational factor. Although AIS users did not exhibit a significant direct effect individually, their presence contributes to the overall explanatory capability of the research model when combined with system quality and data accuracy. This finding supports the multidimensional perspective of the Information Systems Success Model and highlights the importance of integrated AIS management.

Overall, the findings of this study contribute to both theoretical and practical advancements in AIS research. The results demonstrate that data accuracy and system quality are the primary drivers of information effectiveness, while the role of AIS users is less direct. This challenges traditional assumptions and highlights the need for a more integrated approach to AIS management. This study extends the Information Systems Success Model by demonstrating that system quality and data accuracy represent the dominant determinants of accounting information effectiveness in hospitality organizations. Furthermore, the findings indicate that user-related factors may operate indirectly through technological and informational mechanisms rather than exerting direct influence. This contributes to the refinement of AIS literature by proposing a more integrated perspective of system performance. The study also reinforces the importance of data integrity and system performance in achieving organizational objectives. From a practical perspective, hospitality organizations should prioritize investments in system infrastructure and data management practices. Additionally, user training should be aligned with system capabilities to maximize effectiveness. The findings provide actionable insights for improving AIS performance in real-world settings. They also contribute to the development of more comprehensive theoretical models. By integrating multiple variables, the study offers a holistic view of AIS effectiveness. This enhances the relevance of the research for both academics and practitioners. Therefore, the discussion provides a meaningful interpretation of the research findings. This study has several limitations. First, the analysis was conducted using cross-sectional data collected from hospitality organizations in Indonesia, which may limit the generalizability of the findings to other industries or countries. Second, the research employed multiple linear regression rather than more comprehensive structural equation modeling approaches. Third, several organizational variables, such as organizational culture, digital maturity, and top management support, were not included in the analytical model. Future studies are encouraged to incorporate these variables and examine more complex causal relationships across different organizational contexts.

V. Conclusion

This study demonstrates that information effectiveness in hospitality accounting information systems is primarily determined by data accuracy and system quality. Both variables positively and significantly improve the effectiveness of accounting information, whereas AIS users do not exhibit a significant direct influence. Nevertheless, the simultaneous analysis confirms that AIS users, data accuracy, and system quality collectively contribute to improving information effectiveness. These findings indicate that organizational success in utilizing accounting information systems depends on the integration of technological quality, reliable data management, and effective organizational support rather than on individual user capability alone. From a theoretical perspective, this study extends the Information Systems Success Model by demonstrating that data accuracy functions as a strategic determinant of information effectiveness alongside system quality. The findings also provide empirical support for Contingency Theory by showing that the effectiveness of accounting information systems depends on the alignment between technological infrastructure, information quality, and organizational context. Consequently, the study enriches the accounting information systems literature, particularly within hospitality organizations operating in emerging economies.

From a managerial perspective, hospitality organizations should prioritize investments in system integration, database management, and data quality assurance. Continuous system maintenance, standardized accounting procedures, periodic data validation, and employee competency development should be implemented simultaneously to improve the reliability of accounting information and support more effective managerial decision making. These managerial actions are expected to strengthen

organizational competitiveness and operational efficiency. This study is subject to several limitations. First, the research was conducted only within hospitality organizations in Indonesia, thereby limiting the generalizability of the findings. Second, the analytical model employed multiple linear regression, which does not fully capture more complex relationships among organizational variables. Third, other potentially influential variables, including digital maturity, organizational culture, and top management support, were not incorporated into the model. Future studies are encouraged to examine broader industrial sectors and different national contexts to improve external validity. Researchers may also employ Structural Equation Modeling (SEM), Partial Least Squares (PLS-SEM), or longitudinal research designs to investigate more comprehensive causal relationships. Furthermore, additional variables such as digital transformation capability, organizational learning, artificial intelligence adoption, cybersecurity readiness, and organizational resilience should be incorporated to develop a more comprehensive understanding of accounting information system effectiveness.

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