Al- Kharaj : Journal of Islamic Economics and Business
Volume 8 (1), 2026
P-ISSN: 2686-262X; E-ISSN: 2685-9300

The Impact of ERP Implementation on the Quality of Accounting Information and Decision Making

Fauzi*[1], Victor Pattiasina[2], Ulydhatul Ismiyana[3], Amimah Qodari[4], Mohammad Aviciena Taufiqurrahman[5]
Institut Bakti Nusantara[1], Universitas Yapis Papua[2], Universitas Gadjah Mada[3], IAIN Curup[4], Universitas Sunan Gresik[5]
Email: drfauziibn@gmail.com

Keywords :
ERP, Accounting Information Quality, Decision Making, Information Systems

Abstract
This study aims to analyze the effect of Enterprise Resource Planning (ERP) implementation on the quality of accounting information and managerial decision-making. The development of information technology encourages organizations to adopt integrated systems capable of producing real-time, accurate, and relevant information. ERP, as an integrated information system, is believed to improve the quality of financial reporting through cross-functional data integration, process automation, and strengthening internal controls. Good accounting information quality is ultimately expected to support faster, more accurate, and more rational decision-making processes. This study uses a quantitative approach with an explanatory design. Data were collected through questionnaires distributed to managers and staff involved in the use of the ERP system. The data analysis technique used multiple regression to test the direct influence between variables. The results show that ERP implementation has a positive and significant effect on the quality of accounting information. In addition, the quality of accounting information also has a positive and significant effect on decision-making. Thus, effective ERP implementation can improve the quality of accounting information and strengthen the effectiveness of decision-making within an organization. This study implies that ERP system optimization needs to be supported by organizational readiness, human resource competence, and management commitment to maximize the strategic benefits of the system.

INTRODUCTION

The increasingly rapid development of information technology has brought significant changes in management and accounting practices in various organizations, both in the private and public sectors (Kalsum et al., 2023) . Digital transformation encourages companies to integrate information systems capable of managing data in real time, accurately, and integrated across functions (Nainggolan et al., 2025) . In this context, Enterprise Resource Planning (ERP) systems have become one of the main solutions widely adopted by modern organizations (Satria & Fatmawati, 2023) . ERP is an integrated information system that connects various business functions such as finance, production, marketing, human resources, and logistics in a single integrated platform. ERP implementation not only impacts operational efficiency but also the quality of the resulting accounting information and the effectiveness of managerial decision-making. (Nisa & M, 2020) .

The quality of accounting information is a crucial aspect in supporting the decision-making process. Quality accounting information must meet the characteristics of relevance, reliability, timeliness, completeness, and be understandable by users. In practice, many organizations face problems such as late reporting, data inconsistencies between departments, duplication of records,

and poor system integration. These problems often result in inaccurate information and inadequate support for strategic decision-making. Therefore, the implementation of an ERP system is expected to overcome these obstacles through data integration and business process automation (Purba & Situmeang, 2025) .

An ERP system allows all transactions across various work units to be recorded centrally and directly connected to the accounting module. This allows for faster and more accurate financial reporting. Furthermore, ERP supports greater transparency and internal control because every transaction has a clear audit trail. This has the potential to significantly improve the quality of accounting information. The resulting information becomes more real-time, consistent, and less prone to manual errors. In the long term, this improved information quality will strengthen organizational accountability and increase stakeholder trust (Mulyandini, 2020) .

Decision-making in modern organizations is increasingly complex due to the dynamics of a competitive and uncertain business environment. Managers are required to make decisions quickly while remaining based on accurate data. Strategic decisions such as investment, market expansion, cost control, and risk management rely heavily on reliable accounting information. Without adequate information system support, risky decisions become speculative and less rational. ERP implementation has the potential to accelerate data analysis processes because these systems provide dashboards, automated reports, and cross-functional data integration that support comprehensive analysis (Lengkei et al., 2025) .

However, ERP implementation is not a simple process. It requires significant investment, organizational culture change, and human resource training for the system to run optimally. Many organizations fail or fail to achieve maximum benefits from ERP due to lack of planning, employee resistance, or the system's inconsistency with business needs. Therefore, it is important to examine the extent to which ERP implementation truly impacts the quality of accounting information and decision-making. Research on this relationship is relevant to provide empirical evidence on the effectiveness of ERP systems in supporting organizational performance (Agustin & Afiqoh, 2025) .

Theoretically, the relationship between ERP implementation and accounting information quality can be explained through the perspective of information systems and information quality theory. An integrated information system will produce more consistent and standardized data, thereby improving information quality characteristics. Furthermore, from a decision-making theory perspective, quality information will increase the rationality and effectiveness of managerial decisions. Thus, ERP can be positioned as a variable that influences the quality of accounting information, which ultimately impacts the quality of decision-making (Irwan, 2026) .

In Indonesia, ERP adoption continues to increase, particularly among large and medium-sized companies. Global competition and demands for transparency in financial reporting are driving companies to adopt systems that support good corporate governance. However, there are still differences in the success rate of ERP implementation across companies. Some companies report significant improvements in the quality of financial reports and speed of decision-making, while others have not yet experienced optimal impact. This situation indicates the need for more in-depth research into the factors influencing ERP success and its impact on the quality of accounting information. (Roup & Purwanto, 2022) .

Furthermore, in the era of big data and digitalization, ERP plays an increasingly strategic role as the foundation of an organization's information system. ERP functions not only as a transaction recording tool but also as a data integration center for broader business analysis.

Integration with Business Intelligence (BI) systems and other analytical technologies allows management to gain deeper insights into company performance. Supported by comprehensive, real-time information, the decision-making process becomes more responsive to changes in the external environment (Setyowati, 2023) .

This research is important because it examines two fundamental aspects of modern management: accounting information quality and decision-making, within the context of ERP implementation. By understanding the impact of ERP implementation on these two aspects, organizations can design more effective strategies to optimize their existing information systems. Furthermore, the research findings are expected to contribute academically to the development of accounting information systems literature and serve as a practical reference for managers and policymakers in managing information technology investments (Fajariah & Wardana, 2025) .

Based on the above description, it can be concluded that ERP implementation has significant potential to improve the quality of accounting information through data integration, process automation, and enhanced internal control. This improvement in information quality is expected to positively impact the effectiveness and rationality of managerial decision-making. However, this effectiveness is highly dependent on the success of the system implementation, organizational readiness, and human resource competency. Therefore, research on the impact of ERP implementation on the quality of accounting information and decision-making is relevant and important to provide a more comprehensive empirical picture of the strategic benefits of ERP systems in supporting the performance of modern organizations.

METHODS

The research method in this study uses a quantitative approach with an explanatory research design that aims to examine the effect of Enterprise Resource Planning (ERP) implementation on the quality of accounting information and decision-making. The study was conducted in companies that had implemented ERP systems for at least one year so that respondents had sufficient experience in using the system. The study population included financial managers, accounting staff, and operational managers directly involved in the use and utilization of ERP systems. The sampling technique used purposive sampling with certain criteria, such as active involvement in the financial reporting process and system-based decision-making. Primary data were collected through questionnaires using a five-point Likert scale to measure ERP implementation variables (system integration, system quality, management support), accounting information quality (relevance, reliability, timeliness, completeness), and decision-making (speed, accuracy, and effectiveness of decisions). In addition, secondary data were obtained from company documents and related literature to strengthen the analysis.

Data analysis techniques were conducted through inferential statistical tests with the help of analysis software such as SPSS. The analysis stages included instrument validity and reliability tests, classical assumption tests, and hypothesis testing using multiple regression analysis. This analysis aimed to determine the magnitude of the direct effect of ERP implementation on the quality of accounting information and decision-making, as well as the indirect effect through information quality as an intervening variable. The significance level used was 5% ($\alpha = 0.05$). The results of the analysis were then interpreted to answer the problem formulation and provide conclusions regarding the effectiveness of ERP implementation in improving the quality of accounting information and supporting the managerial decision-making process.

RESULTS AND DISCUSSION

1. Normality Test

The purpose of the normality test is to determine whether the residual or confounding variables in a regression model are normally distributed. In this study, the non-parametric Kolomogorov-Smirnov statistical test was used to test for normality. If the significance value is greater than 0.05, the data are considered normally distributed. The findings of the normality test are shown in the table below:

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		42
Normal Parameters [a,b]	Mean	.0000000
	Standard Deviation	1.54310701
Most Extreme Differences	Absolute	.163
	Positive	.052
	Negative	-.144
Kolmogorov-Smirnov Z		1,062
Asymp. Sig. (2-tailed)		.324
a. Test distribution is Normal. b. Calculated from data.		

Source: Data processed with SPSS 2026

Based on the test results in the table above, *the Kolmogorov-Smirnov value* is 1.062 and the significance value is 0.324 > 0.05. Therefore, it can be concluded that the residual values are normally distributed, allowing for further analysis, namely regression analysis.

2. Multicollinearity Test

Multicollinearity testing aims to test whether a regression model is found Correlation between independent variables. In a good regression, there should be no correlation between variables. The results of the multicollinearity test are shown in the following table: poverty rate and economic growth

Table 2. Multicollinearity Test Results

Model		**Collinearity Statistics**	
		Tolerance	**VIF**
	Enterprise Resource Planning (ERP)	.325	3,278
	Quality Information Accountancy	.242	2,641
	Decision -making	.241	3,002

Source: Data processed with SPSS 2026

Based on the table above, it can be concluded that all variables do not exhibit multicollinearity in the data processed in this study. This is because the *tolerance significance value* for all variables is greater than 0.01, and the VIF value for all variables is less than 10.

3. Heteroscedasticity Test

The Heterogeneity Test aims to determine whether the residual variances of one observation differ from another in the regression, which is called homoscedasticity. If they differ, it is called heterogeneity. This study uses the Glejser test to determine whether homoscedasticity is present. The test results are shown in the figure below:

Table 3. Results of Heteroscedasticity Test (Glejser Method)

Coefficients [a]					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.454	.536	.421	4,613	.007
Enterprise Resource Planning (ERP)	.342	.125	.230	2,214	.335
Quality Information Accountancy	.234	.138	.242	2,274	.340
Decision -making	.224	.189	.243	2,301	.302
a. Dependent Variable: res2					

Source: Data processed with SPSS 2026

Based on the test results in the table above, it shows that the Enterprise Resource Planning (ERP) Quality variable has a significance value of 0.335 > 0.05 so it can be concluded that there are no symptoms of heteroscedasticity in the Enterprise Resource Planning (ERP) variable. The Accounting Information Quality variable has a significance value of 0.340 > 0.05 so it can be concluded that there are no symptoms of heteroscedasticity in the Accounting Information Quality variable . The Decision Making variable has a significance value of 0.302 > 0.05 so it can be concluded that there are no symptoms of heteroscedasticity in the Decision Making variable .

Multiple Linear Regression Analysis

Multiple linear regression analysis is a linear relationship between two or more independent variables (X1, X2) and a dependent variable (Y). This analysis aims to determine the direction of the relationship between the independent variables and the dependent variable, whether each independent variable is positively or negatively related. The following are the results of the multiple regression analysis using SPSS, which can be seen in the following table:

t-test results *(t-test)*

The t test shows the relationship between each independent variable (X1 and X2) on the dependent variable with a significance level of 0.05 (5%) and *Degrees of Freedom* (df) = nk. Based on the following criteria.

a. Determine the criteria for testing research hypotheses by comparing the calculated t value with the t_{table}.

1) If the $t_{table\ value} > t_{count}$, then H_o is rejected and H_1 is accepted.
2) If the $t_{table\ value} < t_{calculated}$ then $Ho_{\ is\ accepted}$ and H_1 is rejected.

b. By using the probability significance figures

1) If the sig value > 0.05 then H_o is accepted and H_1 is rejected.
2) If the sig value <0.05 then $H_{1\ accepted}$ and Ho is rejected

Table 4. Results of the t-test

Coefficients [a]					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.654	0.452		.327	.679
Enterprise Resource Planning (ERP) - Quality Information Accountancy	.273	.238	.236	2,870	0.00
Enterprise Resource Planning (ERP)-Decision Making	.209	.350	.224	2,410	0.00
Accounting Information Quality - Decision Making	.331	.162	.376	2,256	0.03
a. Dependent Variable:					

Source: Data processed by researchers using SPSS 2026

Based on the table above, it can be concluded that Enterprise Resource Planning (ERP) has a significant effect on the Quality of Accounting Information with a t-statistic value of 2,870 and a sig value of 0.00 <0.05. Enterprise Resource Planning (ERP) has a significant effect on Decision Making with a t-statistic value of 2,410 and a sig value of 0.00 <0.05. Quality Information Accounting has a significant influence on Decision Making with a t-statistic value of 2.256 and a p-value of 0.003 < 0.05.

DISCUSSION

The results of data analysis indicate that Enterprise Resource Planning (ERP) implementation has a positive and significant effect on the quality of accounting information. Based on hypothesis testing using regression analysis, the path coefficient between ERP

implementation and accounting information quality is in a positive direction with a significance level below 0.05. This indicates that the better the level of system integration, system quality, ease of use, and management support in ERP implementation, the higher the quality of the resulting accounting information. Empirically, respondents stated that ERP systems can improve the timeliness of financial reporting, reduce manual recording errors, and strengthen data consistency between departments. The integration feature between modules in ERP allows transactions occurring in the operational section to be automatically reflected in the accounting module, so that the reconciliation process becomes faster and more accurate (Effendhi, 2025; Galih & Fahmi, 2023; Wibisono, 2024) .

Furthermore, research results also show that the quality of accounting information has a positive and significant impact on managerial decision-making. Relevant, reliable, complete, and timely information has been shown to increase the speed and accuracy of management decisions. In this context, information quality serves as a rational basis for evaluating alternative decisions. Managers who obtain real-time financial reports through an ERP system tend to be more responsive to changing business conditions, such as cost fluctuations, declining sales, or increased operating expenses. Thus, the quality of accounting information is a key factor in improving the effectiveness of strategic and operational decision-making (Juliani & Masitoh, 2024; Munir et al., 2025; Safitri & Rahayu, 2024) .

Furthermore, testing the direct effect of ERP implementation on decision-making showed significant results, although the magnitude of the effect was smaller than the indirect effect through accounting information quality. This finding indicates that accounting information quality acts as a mediating variable that strengthens the relationship between ERP implementation and decision-making. This means that ERP does not necessarily improve decision quality simply through the existence of the system, but through improving the quality of the information it produces. Theoretically, this finding aligns with the information systems perspective, which states that system quality will impact information quality, which in turn influences decision quality (Kinanti et al., 2025; Marwa & Ardila, 2024; Wahtan et al., 2025) .

From a practical perspective, the research findings confirm that the success of ERP implementation is highly dependent on organizational readiness, human resource competency, and top management commitment. Several respondents stated that ERP benefits are not optimal when user training is inadequate or when there is resistance to changes in work systems. This suggests that technical and non-technical factors must be aligned for ERP to deliver maximum impact on information quality and decision-making. In other words, technology investment needs to be balanced with user capacity development and business process improvements. (Misnawati et al., 2025; Nawawi, 2018; Widyaningdyah, 2013) .

Overall, the discussion of the research findings reinforces the argument that ERP implementation is a crucial strategy for improving the quality of accounting information and the effectiveness of managerial decision-making. ERP functions as an integrative system capable of presenting real-time, accurate, and comprehensive information, thereby supporting management in formulating more precise, data-driven policies. These findings imply that organizations seeking to improve their competitiveness and governance quality need to optimize the use of ERP not merely as an administrative tool but as a strategic instrument for informed decision-making.

CONCLUSION

Based on the research results, it can be concluded that the implementation of Enterprise Resource Planning (ERP) has a positive and significant impact on the quality of accounting information. System integration, business process automation, and interconnectedness between modules within ERP have been proven to improve the relevance, reliability, timeliness, and completeness of the information produced. With a centralized and real-time system, manual recording errors can be minimized and data consistency across organizational units can be better maintained. This study also found that the quality of accounting information has a positive and significant impact on managerial decision-making. Quality information provides a more rational, accurate, and rapid basis for management in determining strategic and operational policies. Thus, ERP functions not only as an administrative tool, but also as a strategic instrument in supporting managerial effectiveness and improving organizational performance.

Suggestion

Based on these conclusions, several suggestions that can be given are as follows:

For Company Management

Organizations need to ensure that ERP implementation is comprehensive and well-planned, including system requirements analysis, infrastructure readiness, and user training. Top management support and fostering a data-driven culture are crucial for optimal ERP utilization in improving information quality and decision-making.

For System Users (Staff and Managers)

Improved competency and understanding of ERP features are necessary to maximize the utilization of the information generated. Ongoing training and periodic system evaluations will help minimize errors and increase the effectiveness of data utilization in decision-making.

For Further Researchers

Future research is recommended to include other variables such as organizational culture, system quality, user satisfaction, or company performance as moderating or mediating variables. Furthermore, research could be expanded with mixed methods or in-depth case studies to obtain a more comprehensive picture of the success of ERP implementations in various industries.

With proper implementation, ERP can be a strong information system foundation in improving the quality of accounting information and supporting more effective, accurate, and data-driven decision making.

REFERENCE

Agustin, A. V., & Afiqoh, N. W. (2025). Pengaruh Sistem Informasi Akuntansi , Efektivitas Pengendalian Internal Terhadap Kualitas Laporan Keuangan. *Journal of Culture Accounting and Auditing Journal*, *4*(2), 22–35.

Effendhi, N. A. (2025). Pengaruh Karakteristik Pengguna dan Karakteristik Organisasi Terhadap Kualitas Laporan Keuangan Dalam Implementasi Enterprise Resource Planning (ERP). *Journal of Culture Accounting and Auditing*, *4*(2), 36–45.

Fajariah, A. E., & Wardana, D. (2025). Pengaruh Penerapan Enterprise Resource Planning (ERP) dan Kualitas Audit Terhadap Penyajian Laporan Keuangan Pada CV Putera Perkasa. *PERMANA: Jurnal Perpajakan, Manajemen, Dan Akuntansi*, *17*(3), 1360–1374.

Galih, S. A. M., & Fahmi, M. A. (2023). ERP System Implementation in the Supply Chain Division of PT . Pindad Implementasi Sistem ERP Pada Divisi Rantai Pasok PT . Pindad (Persero). *Jurnal Kewirausahaan, Akuntansi Dan Manajemen Tri Bisnis*, *5*(2), 139–148.

Irwan. (2026). Transformasi Digital Dalam Akuntansi: Dampak Erp Terhadap Kualitas Pelaporan Keuangan. *Jurnal Ilmiah Bisnis & Kewirausahaan*, *15*(1), 14–28.

Juliani, L., & Masitoh, G. (2024). Pengaruh Implementasi Sistem Berbasis (Erp) Untuk

Peningkatan Kinerja Operasional Pada Pt Laju Perdana Indah. *Jati (Jurnal Mahasiswa Teknik Informatika)*, *8*(2), 2399–2404.

Kalsum, U., Irwan, D., Suratman, Kalsum, U., & Irwan, D. (2023). Jurnal Darma Agung Dampak Implementasi Sistem Erp (Enterprise Resource Planning) Terhadap Efisiensi Proses Akuntansi Dan. *Jurnal Darma Agung*, *31*(6), 413–419.

Kinanti, A. S., Aso, M. A., Ariyadi, S. M., & Aisyah, S. (2025). Dampak Teknologi Informasi Terhadap Akuntansi Pemerintahan di Era Digital perkembangan penerapan akuntansi digital di pemerintahan , khususnya terkait peningkatan. *Jkpim : Jurnal Kajian Dan Penalaran Ilmu Manajemen*, *3*(1), 169–174.

Lengkei, M., Sael, M. L., & Langi, T. A. (2025). Analisis Pengaruh Akuntansi Manajemen Dalam Pengambilan Keputusan Manajerial Pada PT SMA. *Jurnal Mahasiswa Akuntansi Vokasi*, *1*(9), 461–468.

Marwa, S., & Ardila, I. (2024). Analisis Efektifitas Sistem Informasi Akuntansi Penjualan. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi (Jebma)*, *4*(3), 2175–2183.

Misnawati, I., Mus, A. R., & Bakri, A. A. (2025). Implementasi Enterprise Resource Planning (ERP) Terhadap Kinerja Pengguna Pada Perum Bulog Cabang Parepare. *Journal of Artificial Intelligence and Digital Business (RIGGS)*, *4*(2), 7061–7066.

Mulyandini, V. C. (2020). Pengaruh Implementasi Internal Control dan Kompetensi terhadap Pemakai Sistem Informasi Akuntansi. *Portofolio: Jurnal Ekonomi, Bisnis, Manajemen Dan Akuntansi*, *17*(1), 66–75.

Munir, B. M., Azahro, K. A., Sari, M. A., & Sholihah, A. R. (2025). Pengaruh Implementasi Sistem ERP Terhadap Kepuasan Pengguna Pada Perusahaan Jasa Pengiriman Di Karanganyar. *Journal of Artificial Intelligence and Digital Business (RIGGS)*, *4*(2), 4112–4118.

Nainggolan, J. T., Tambunan, E., & Sinaga, R. M. (2025). pengaruh implementasi Enterprise Resource Planning (ERP) terhadap kualitas laporan keuangan dan pengelolaan akuntansi pada berbagai organisasi. *Jurnal Ilmu Ekonomi Dan Bisnis*, *3*(1), 175–185.

Nawawi, M. (2018). Dampak Implementasi Erp Terhadap Kapabilitas Organisasi Dan Kinerja Perusahaan. *Jurnal Riset Akuntansi Terpadu*, *11*(2), 238–253.

Nisa, A. A., & M, V. C. (2020). Pengaruh Kemampuan Pengguna dan Pengendalian Internal terhadap Kualitas Sistem Informasi Akuntansi pada Salah Satu Perusahaan Manufaktur di Kota Bandung. *Prosiding The 11th Industrial Research Workshop and National Seminar*, 26–27.

Purba, I. M., & Situmeang, A. L. (2025). Pengaruh Akuntansi Manajemen dalam Meningkatkan Kualitas Pengambilan Keputusan di Perusahaan. *JURNAL ILMIAH EKONOMI DAN MANAJEMEN*, *3*(7), 349–354.

Roup, A., & Purwanto, E. (2022). Dampak Implementasi Enterprise Resource Planning Terhadap Kualitas Informasi Keuangan , Manajemen Laba , Dan Return Of Equity. *Enterprise Resource Planning and Financial*, *10*(3), 533–540. https://doi.org/10.37641/jiakes.v10i3.1464

Safitri, N. D., & Rahayu, I. (2024). Determinan ketepatan waktu penyampaian laporan keuangan Dengan implementasi ERP sebagai moderasi. *NCAF*, *6*(4), 10–24.

Satria, M. R., & Fatmawati, A. P. (2023). Analisis Penerapan Enterprise Resource Planning Berbasis Sap Dalam Meningkatkan. *Land Journal*, *4*(2), 108–123.

Setyowati, R. (2023). Peranan Sistem Informasi Akuntansi Terhadap Kualitas Sumber Daya Manusia Dan Perspektif Keberhasilan Penerapan Erp Pada Pt Telkom Indonesia. *Muqaddimah: Jurnal Ekonomi, Manajemen, Akuntansi Dan Bisnis*, *1*(1), 51–64.

Wahtan, A., Hayat, N., & Sumarni. (2025). Pengaruh Penerapan Sistem Informasi Akuntansi ,

Kualitas Sumber Daya Manusia Dan Sistem Pengendalian Internal Terhadap Kualitas Laporan Keuangan. *Advances in Management & Financial Reporting*, *3*(3), 363–381.

Wibisono, A. F. (2024). The Impact Erp System Implementations On Earning Manage- Ment And Timeliness Financial Statement (Empirical Studies On Adopters Sap In Indonesian Stock Exchanges) Dampak Implementasi Sistem Erp Terhadap Manajemen Laba Dan Ketepatan Waktu Penyampaian Lap. *Mabis: Jurnal Manajemen Bisnis Syariah*, *1*(2), 1–12.

Widyaningdyah, A. U. (2013). Implementasi enterprise resource planning dan proses akuntansi : Studi eksploratori pada perusahaan manufaktur skala besar. *Journal of Business and Information Systems*, *1*(2), 89–102. https://doi.org/10.36067/jbis.v1i2.25