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Reducing Operational Inefficiencies In Financial Systems: The Role Of ERP Integration In The Us Economy

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Abstract
The study examined the role of Enterprise Resource Planning (ERP) integration in reducing operational inefficiencies in financial systems within the United States economy. A survey research design was adopted for the study, targeting ERP end users in the United States financial sector. The population consisted of ERP users in financial institutions, while a sample size of 150 respondents was selected using a snowball sampling technique. Primary data were collected using a structured electronic questionnaire and analyzed using mean and frequency distribution. Linear regression was used to test the hypothesis at 5% significance level. The finding indicated that ERP integration significantly reduces operational inefficiencies by improving data processing, enhancing coordination, and supporting timely financial decisions ($\beta = -0.295$, $p = 0.003$). In conclusion, by improving data processing and ensuring that information flows seamlessly across departments, ERP integration reinforces the reliability and consistency of financial records, which is essential for maintaining transparency and accountability in a highly regulated environment. The study recommended that chief financial officers and enterprise system governance teams should establish continuous ERP performance auditing mechanisms that go beyond routine system checks by using real operational data to identify hidden inefficiencies such as delayed reconciliations, overlapping approvals, and underutilized modules within the ERP environment.

Keywords: *Operational Inefficiencies, Financial Systems, Enterprise Resource Planning, US Economy*

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I. Introduction

The economic terrain of the United States has continued to evolve in response to technological change, increased market competition, and rising expectations for transparency and accountability. Financial systems play a central role in this environment because they support planning, reporting, and control across organizations of all sizes (Helleiner et al., 2025). As businesses expand and transactions become more complex, managing financial information has become more demanding. Nworie et al. (2022) argued that organizations now deal with large volumes of data that must be processed accurately and in a timely manner to support both internal decisions and external reporting requirements. At the same time, regulatory expectations have apparently become stricter, placing additional pressure on firms to maintain reliable and well-structured financial systems. When inefficiencies exist within these systems, the consequences can include reporting delays, increased operational costs, and exposure to compliance risks (Kweh et al., 2024). These challenges have encouraged organizations to seek better ways of organizing their financial processes and improving coordination across departments. The shift toward digital solutions has therefore become a key feature of modern business practice in the United States (Agbeve et al., 2025), with firms increasingly adopting integrated systems to strengthen their financial operations and remain competitive in a rapidly changing environment. This transition is consistent with evidence that enterprise resource planning systems enhance data centralization, improve accuracy, and support timely decision-making across organizational functions (Sarker, 2024; Halimuzzaman & Sharma, 2024).

Operational efficiency has become a critical concern for organizations that aim to sustain performance and remain competitive (Osuala et al., 2025). According to Madanhire and Mbohwa (2016), operational efficiency refers to the ability of a firm to utilize its resources effectively while minimizing waste and unnecessary costs. In a business environment where speed and accuracy are highly valued, inefficiencies can reduce productivity and limit an organization's ability to respond to market demands. This is particularly relevant in financial management, where delays or errors in processing information can affect decision making and overall performance. Enterprise Resource Planning (ERP) systems have gained importance as organizations seek to improve efficiency and coordination across their operations (Heese & Pacelli, 2025). These systems provide a unified platform that integrates different business functions, including finance, procurement, and human resources, allowing data to be shared seamlessly across departments. In the United States, where firms often operate across multiple locations and deal with complex regulatory requirements (Oyewole, 2026a; Oyewole, 2026b), the need for such integration has become more pronounced. ERP systems help organizations standardize

processes, reduce duplication of effort, and improve the accuracy of financial data. As a result, they have become a valuable tool for enhancing operational efficiency and supporting effective management practices in a competitive business environment. Empirical studies support this view, showing that ERP integration improves service delivery, communication performance, and overall operational outcomes (Njue, 2025; Feng & Ali, 2024).

The studies by Njue (2025); Adesina et al. (2024) and Tapang and Azubike (2018) vehemently argued that the integration of Enterprise Resource Planning systems into financial operations has been shown to reduce inefficiencies in several important ways. One of the main benefits is the automation of routine financial tasks, such as data entry, transaction processing, and report generation. By reducing the reliance on manual processes, organizations can minimize errors and save time, which leads to more accurate and timely financial information. In addition, ERP systems enable real time access to financial data, allowing managers to monitor performance and make informed decisions without delay (Madanhire & Mbohwa, 2016). This improved visibility supports better planning and control, which are essential for maintaining efficiency. Another important aspect of ERP integration is the standardization of financial processes across the organization. When procedures are consistent, it becomes easier to ensure compliance with regulations and internal policies. Furthermore, ERP systems enhance communication between departments by providing a common platform for information sharing (Usmani et al., 2023). This reduces the risk of miscommunication and ensures that all parts of the organization are working with the same data. Through these mechanisms, ERP integration helps to eliminate bottlenecks, reduce operational costs, and improve the overall effectiveness of financial systems within organizations in the United States. Prior research further indicates that ERP capability (particularly real-time data accessibility, automation, and system integration) significantly improves operational efficiency and decision-making quality (Shish & Shafa, 2023; Wulan et al., 2024).

In a competitive and highly regulated economy such as that of the United States, financial systems are expected to support accurate reporting, timely decision making, and efficient coordination across all organizational units (Alao et al., 2024). Organizations are expected to maintain systems that allow seamless data flow, reduce duplication of tasks, and ensure that financial information is readily available to managers and stakeholders. The use of integrated technological solutions such as Enterprise Resource Planning systems is intended to support these goals by bringing together various business functions into a single platform (Njue, 2025). When properly implemented and utilized, such systems promote consistency in financial processes, strengthen internal controls, and enhance the overall management of organizational resources. This creates an environment where decisions are based on reliable data, operational costs are minimized, and compliance requirements are met without unnecessary delays or complications. Evidence also suggests that ERP systems can strengthen internal controls and reduce regulatory violations, thereby improving compliance and governance outcomes (Heese & Pacelli, 2025).

In practice, many organizations continue to face challenges in achieving this level of efficiency within their financial systems (Kweh et al., 2024). Despite the availability of ERP solutions, issues such as poor system integration, inadequate user training, and resistance to technological change often limit their effectiveness. In some cases, organizations rely on partially integrated systems or outdated processes that require manual intervention, leading to fragmented data and inconsistencies in reporting. Financial information may be stored across multiple platforms, making it difficult to achieve a unified view of organizational performance. Additionally, the complexity of ERP implementation, combined with high costs and limited technical expertise, has prevented some firms from fully adopting or optimizing these systems. As a result, the potential benefits of ERP integration are not always realized, and inefficiencies persist within financial operations. Prior studies highlight similar constraints, including high implementation costs, organizational resistance, inadequate infrastructure, and user adoption challenges, all of which can hinder ERP effectiveness (Sarker, 2024; Oldacre, 2016; Adesina et al., 2024).

These challenges have significant consequences for organizational performance and sustainability. Inefficient financial systems can lead to delays in reporting, errors in data processing, and increased operational costs, all of which can weaken a firm's competitive position (Morelli, 2023). Poor integration also limits the ability of managers to access timely and accurate information, which affects the quality of decision making and strategic planning. In a regulatory environment that demands transparency and accountability, such shortcomings may expose organizations to compliance risks and potential penalties. Over time, these issues can erode stakeholder confidence and hinder growth. Empirical evidence suggests that while ERP systems can improve productivity and operational outcomes, their benefits may not always translate immediately into profitability, particularly when implementation is incomplete or poorly managed (Meiryani et al., 2021; Mohamed & Farahat, 2019; Tapang & Azubike, 2018).

Despite the growing body of empirical literature on ERP systems, a clear gap remains regarding the specific role of ERP integration in reducing operational inefficiencies within financial systems, particularly in the United States context. Existing studies such as Heese and Pacelli (2025) have largely focused on compliance outcomes, while Njue (2025) and Adesina et al. (2024) emphasized performance and efficiency within banking

environments outside the U.S. Similarly, Feng and Ali (2024) and Wulan et al. (2024) concentrated on manufacturing firms, limiting the generalizability of their findings to financial systems. Although Sarker (2024) and Halimuzzaman and Sharma (2024) highlighted the benefits of ERP in improving data accuracy and decision-making, their works were largely conceptual or context-specific and did not empirically isolate financial system inefficiencies as a central outcome. In addition, Shish and Shafa (2023) examined ERP capabilities broadly without focusing specifically on financial processes, while Meiryani et al. (2021) assessed financial performance outcomes without clearly linking them to process efficiency or data quality dimensions. Furthermore, many prior studies relied on secondary data, case studies, or sector-specific samples, with limited use of primary data from ERP end users to capture real-time system effectiveness. Therefore, there is a need for a focused empirical investigation that examines how ERP integration directly influences process efficiency, data accuracy, and financial decision-making within financial systems in the United States, using user-level data and robust analytical techniques, which this study aims to address. Hence the study examined how the integration of Enterprise Resource Planning systems reduces operational inefficiencies within financial systems in the United States.

II. Literature Review

Synthesis of Existing Empirical Studies

Empirical evidence on ERP integration consistently points to its capacity to improve efficiency and reduce irregularities within organizational systems, although the strength of these effects varies across contexts. For instance, Heese and Pacelli (2025) showed that ERP implementation in U.S. firms was associated with a reduction in corporate misconduct and regulatory violations, suggesting that improved system coordination can strengthen internal monitoring and compliance. This aligns with broader observations that ERP systems enhance transparency and accountability in financial processes. Similarly, Mohamed and Farahat (2019) found that ERP adoption influenced operational performance both directly and indirectly, particularly through improvements in service quality. While these findings support the argument that ERP systems can enhance organizational outcomes, they also suggest that such improvements are not limited to efficiency alone but extend to governance and control. This broader impact is important in understanding how ERP integration contributes to reducing inefficiencies within financial systems, especially in environments where compliance and accuracy are critical.

Further studies emphasize the role of ERP systems in improving operational efficiency through better resource utilization and process coordination. Feng and Ali (2024) demonstrated that ERP integration, particularly when aligned with digital transformation efforts, improved organizational effectiveness in manufacturing firms. In a similar vein, Sarker (2024) highlighted that ERP systems reduce manual processes, enhance data accuracy, and support timely decision making, all of which contribute to improved efficiency. Shish and Shafa (2023) extended this argument by showing that ERP capability, measured through factors such as real time data access, system integration, and automation, accounted for a significant proportion of variation in operational efficiency. Their findings further revealed that efficiency gains were influenced by organizational conditions such as system maturity and user competence. These studies collectively indicate that ERP systems are not inherently effective but depend on how well they are integrated and utilized within organizations. This introduces a critical dimension to the discussion by suggesting that the mere presence of ERP systems does not guarantee efficiency improvements unless supported by adequate infrastructure and organizational readiness.

Evidence from sector specific studies also reinforces the positive relationship between ERP integration and financial performance, although with some variations. Wulan et al. (2024) found that ERP adoption significantly improved both operational and financial efficiency in manufacturing firms, particularly through reduced production time, better inventory management, and improved cash flow. In the banking sector, Njue (2025) reported that system integration enhanced performance through improved data communication, service delivery, and transaction security. Adesina et al. (2024) similarly observed that ERP systems improved financial efficiency by automating processes and providing real time data for decision making. However, not all findings are uniformly positive. Meiryani et al. (2021) noted that while ERP implementation increased productivity, it did not necessarily translate into higher profitability, pointing to a gap between operational improvements and financial outcomes. Tapang and Azubike (2018) also highlighted that the financial benefits of ERP systems may take time to materialize, indicating a delayed impact. These variations suggest that while ERP integration can reduce inefficiencies, its financial implications may depend on factors such as implementation quality, time horizon, and organizational context.

Despite the documented benefits, several studies draw attention to the challenges that limit the effectiveness of ERP systems in practice. Oldacre (2016) emphasized that user acceptance remains a critical issue, as the perceived usefulness of ERP systems significantly influences their adoption and utilization. Without adequate user engagement, the potential efficiency gains may not be realized. Sarker (2024) also identified barriers such as high implementation costs, limited technical expertise, and organizational resistance, which can hinder successful integration. In addition, Madanhire and Mbohwa (2016) showed that achieving efficiency improvements requires more than system adoption, as it involves coordinated efforts to improve communication,

reduce waste, and optimize operational processes. Halimuzzaman and Sharma (2024) further noted that while ERP integration improves the quality and timeliness of financial information, these benefits depend on how effectively the system is aligned with accounting processes and internal controls. Taken together, these findings highlight a clear tension between the potential of ERP systems to reduce operational inefficiencies and the practical challenges associated with their implementation. This suggests that achieving meaningful improvements in financial systems requires not only the adoption of ERP technologies but also careful attention to organizational, technical, and human factors.

Theoretical Framework and Development of Research Hypothesis

This study was anchored on the Information System Success Theory which was developed by William DeLone and Ephraim McLean in 1992 as a way of understanding how information systems could be evaluated in terms of their effectiveness (Tapang & Azubike, 2018). Their work brought together different measures of system performance that had previously been studied separately and organized them into a unified framework. The model was later refined in 2003 to reflect changes in technology and the growing importance of internet based systems (Çelik & Ayaz, 2022). This updated version expanded the original structure by including service quality and combining individual and organizational impacts into a broader concept of net benefits. Since its development, the theory has been widely applied in studies that examine the performance and outcomes of information systems across different sectors, including finance, healthcare, and manufacturing.

The theory explains that the success of an information system can be assessed through a set of related dimensions (Tapang & Azubike, 2018). These include system quality, which refers to how well the system performs in terms of reliability and usability, and information quality, which focuses on the accuracy, relevance, and timeliness of the data produced. Service quality was later added to capture the level of support provided to users. These elements influence system use and user satisfaction, which are seen as immediate outcomes of system performance. When users find a system useful and easy to work with, they are more likely to use it effectively (Oldacre, 2016). This, in turn, leads to positive outcomes described as net benefits, such as improved decision making, higher productivity, and better organizational performance. The model emphasizes that these dimensions are interconnected, meaning that weaknesses in one area can affect the overall success of the system (Lutfi et al., 2022).

This theory is relevant to the study of reducing operational inefficiencies in financial systems through ERP integration in the United States because ERP systems are a form of information system that must perform effectively to deliver value. The framework helps explain how features such as system reliability, data accuracy, and user support influence the extent to which ERP systems are used and accepted within organizations. When these elements are strong, ERP systems are more likely to improve the quality and availability of financial information, which supports better decision making and reduces delays and errors. In contrast, if users find the system difficult to use or if the information generated is unreliable, the expected improvements may not be achieved. The theory therefore provides a useful lens for understanding why some organizations benefit more from ERP integration than others, and how improvements in system quality, information quality, and user engagement can contribute to reducing inefficiencies in financial systems. In line with the above, the study hypothesised that:

H_1: ERP integration significantly reduces operational inefficiencies in financial systems in the United States economy.

III. Methodology

The study adopted a survey research design to examine how ERP integration influences the reduction of operational inefficiencies in financial systems within the United States economy. A survey design was considered appropriate because it allows for the collection of data directly from individuals who interact with ERP systems in their daily work environment (Nworie et al., 2026). It also provides an opportunity to capture perceptions, experiences, and patterns of system use across different organizations within the financial sector. This approach supports the analysis of relationships between ERP integration and operational outcomes, while allowing the researcher to generalize findings within the defined population. The design is particularly suitable for studies that focus on human interaction with information systems, since user experience plays a major role in determining system effectiveness and overall performance.

The population of the study consisted of ERP end users within the United States financial sector. These included employees working in areas such as accounting, finance, auditing, risk management, and information technology who regularly interact with ERP systems as part of their job responsibilities. This group was selected because they are directly involved in the use of ERP systems and are therefore in a position to provide relevant information on how such systems affect financial processes and operational efficiency. Their experiences offer practical insight into system functionality, data handling, and workflow integration, all of which are important in understanding the role of ERP systems in reducing inefficiencies.

A sample size of 150 respondents was selected from the population of ERP end users in the financial sector. This number was considered sufficient to provide a reasonable representation of user perspectives while remaining manageable for data collection and analysis. The study employed a snowball sampling technique to reach participants. This method involved identifying a few initial respondents who met the study criteria and then asking them to refer other ERP users within their professional networks. The technique was suitable given the specialized nature of the population, as ERP users in financial organizations are not always easily accessible through conventional sampling methods. Snowball sampling helped to expand the reach of the study and ensured that respondents had relevant experience with ERP systems.

Data for the study were collected using a structured questionnaire as the primary method. The questionnaire was designed to obtain information on ERP integration and its influence on operational inefficiencies in financial systems. It was distributed to respondents through online Google Forms, which made it easier to reach participants across different locations within the United States. The use of Google Forms also improved convenience, reduced response time, and allowed for automatic recording of responses for analysis. The questionnaire contained items measured on a five point Likert scale consisting of very high extent, high extent, neutral, low extent, and very low extent. This scale enabled respondents to indicate the degree to which they agreed with each statement, thereby providing measurable data for analysis.

The method of data analysis involved both descriptive and inferential techniques. Mean and frequency distributions were used to analyze responses to each research question, providing a clear summary of how respondents perceived the impact of ERP integration on operational inefficiencies. The mean helped to determine the average response level for each item, while frequency distributions showed the pattern of responses across the different scale points. For the test of the hypothesis, linear regression analysis was employed. This technique was appropriate because it allowed for the examination of the relationship between ERP integration and the level of operational inefficiency. Through this approach, the study was able to determine whether ERP integration had a statistically significant effect on reducing inefficiencies within financial systems.

IV. Data Analysis

Descriptive Analysis

Table 4.1 presents the descriptive statistics of responses on Enterprise Resource Planning (ERP) systems and operational inefficiencies within financial systems. In the table, VLE represents Very Low Extent, LE represents Low Extent, N represents Neutral, HE represents High Extent, and VHE represents Very High Extent. The table also includes the mean values which summarize the average level of agreement for each statement.

Table 4.1 Descriptive Statistics

S/N	Enterprise Resource Planning (ERP) Systems	VLE	LE	N	HE	VHE	Mean
1	My organization uses ERP systems to integrate financial processes across departments.	11	6	26	65	42	3.81
2	ERP systems in my organization provide real time access to financial information.	25	0	24	41	60	3.74
3	ERP systems help in automating financial transactions and reporting.	24	18	0	84	24	3.44
4	ERP systems improve coordination between finance and other departments.	0	9	26	69	46	4.01
5	ERP systems enhance the accuracy of financial data in my organization.	20	27	0	84	19	3.37
6	ERP systems reduce duplication of financial tasks in my organization.	16	2	10	30	92	4.20
S/N	**Operational Inefficiencies within Financial Systems**	**VLE**	**LE**	**N**	**HE**	**VHE**	**Mean**
7	Financial processes in my organization experience delays due to system limitations.	46	88	4	2	10	1.95
8	Errors often occur in financial reporting due to manual processing.	36	72	8	13	21	2.41
9	There is duplication of financial tasks across departments.	46	90	4	0	10	1.92
10	Financial data is sometimes inconsistent across different units in my organization.	36	76	0	14	24	2.43
11	Decision making is delayed due to lack of timely financial information.	40	74	21	15	0	2.07
12	Inefficient financial systems increase operational costs in my organization.	42	65	26	6	11	2.19

Source: Field Survey (2026)

As shown in Table 4.1 above, for the first item, which examines whether organizations use ERP systems to integrate financial processes across departments, the frequencies show that most respondents selected High Extent with 65 responses and Very High Extent with 42 responses. Only a small number indicated Very Low Extent and Low Extent with 11 and 6 responses respectively, while 26 respondents were neutral. The mean score of 3.81 suggests that respondents generally agreed that ERP systems are actively used for financial integration across departments.

The second item, which focused on real time access to financial information through ERP systems, shows a strong concentration of responses in the positive categories. A total of 60 respondents selected Very High Extent and 41 selected High Extent, while 25 selected Very Low Extent and 24 were neutral. The absence of Low

Extent responses suggests a clear split in perception, but the overall mean of 3.74 indicates that many respondents believe ERP systems provide timely financial access.

For the third item, which assessed automation of financial transactions and reporting, most respondents indicated High Extent with 84 responses, while 24 selected Very High Extent. However, 24 respondents indicated Very Low Extent and 18 selected Low Extent, while no respondents were neutral. This mixed distribution suggests variation in ERP automation experience across organizations, although the mean of 3.44 still reflects moderate agreement.

The fourth item examined whether ERP systems improve coordination between finance and other departments. The responses were largely positive, with 69 respondents selecting High Extent and 46 selecting Very High Extent. Only 9 respondents indicated Low Extent, and 26 were neutral, while none selected Very Low Extent. The high concentration in the upper categories produces a mean of 4.01, indicating strong agreement that ERP systems enhance interdepartmental coordination.

For the fifth item, which focused on the accuracy of financial data, responses were more distributed. While 84 respondents selected High Extent and 19 selected Very High Extent, a notable number of respondents chose Low Extent with 27 responses and Very Low Extent with 20 responses. The absence of neutral responses suggests clear opinions among respondents. The mean of 3.37 reflects moderate agreement, although the spread of responses suggests that not all organizations experience improved data accuracy in the same way.

The sixth item assessed whether ERP systems reduce duplication of financial tasks. The responses show a strong concentration in the Very High Extent category with 92 responses, followed by 30 in High Extent. Only 16 respondents selected Very Low Extent, 2 selected Low Extent, and 10 were neutral. This pattern indicates a strong perception that ERP systems significantly reduce duplication in financial tasks, which is supported by the highest mean value of 4.20 among all ERP items.

The seventh item focused on delays in financial processes due to system limitations. The majority of respondents selected Low Extent with 88 responses and Very Low Extent with 46 responses. Only a small number selected High Extent and Very High Extent with 2 and 10 responses respectively, while 4 were neutral. The low mean value of 1.95 indicates that most respondents do not strongly experience delays, suggesting that ERP systems may be reducing such inefficiencies.

For the eighth item, which examined errors in financial reporting due to manual processing, responses were also skewed toward the lower categories. A total of 72 respondents selected Low Extent and 36 selected Very Low Extent, while 13 selected High Extent and 21 selected Very High Extent. Only 8 respondents were neutral. The mean of 2.41 suggests that although manual errors still exist in some cases, they are not highly prevalent across all organizations.

The ninth item assessed duplication of financial tasks across departments. Most respondents selected Low Extent with 90 responses and Very Low Extent with 46 responses, while only 10 selected Very High Extent and 4 were neutral. No respondents selected High Extent. The mean of 1.92 shows a strong indication that duplication of financial tasks is generally low, suggesting that ERP systems may be effective in minimizing redundant processes.

For the tenth item, which examined inconsistency in financial data across units, responses show that 76 respondents selected Low Extent and 36 selected Very Low Extent. A smaller number selected Very High Extent with 24 responses and High Extent with 14 responses, while no respondents were neutral. The mean of 2.43 indicates that although inconsistencies exist in some organizations, they are generally not widespread.

The eleventh item focused on delays in decision making due to lack of timely financial information. The responses show that 74 respondents selected Low Extent and 40 selected Very Low Extent, while 21 were neutral and 15 selected High Extent. No respondents selected Very High Extent. The mean value of 2.07 suggests that delays in decision making are not strongly experienced in most organizations, possibly due to improved ERP support.

Finally, the twelfth item examined whether inefficient financial systems increase operational costs. The majority of respondents selected Low Extent with 65 responses and Very Low Extent with 42 responses. A smaller number selected Neutral with 26 responses, High Extent with 6 responses, and Very High Extent with 11 responses. The mean of 2.19 indicates that most respondents do not strongly perceive inefficient systems as a major driver of increased operational costs, which may reflect improvements brought by ERP integration.

Test of Hypothesis

H_1: ERP integration significantly reduces operational inefficiencies in financial systems in the United States economy.

Table 4.2 Test of Hypothesis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.243[a]	.059	.053	3.533
a. Predictors: (Constant), Enterprise Resource Planning (ERP) Systems				

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	115.563	1	115.563	9.259	.003[b]
	Residual	1847.271	148	12.482		
	Total	1962.833	149			
a. Dependent Variable: Operational Inefficiencies within Financial Systems						
b. Predictors: (Constant), Enterprise Resource Planning (ERP) Systems						

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	19.617	2.204		8.899	.000
	Enterprise Resource Planning (ERP) Systems	-.295	.097	-.243	-3.043	.003
a. Dependent Variable: Operational Inefficiencies within Financial Systems						

Source: SPSS V. 26 Output (2026)

Table 4.2 presents the model summary, ANOVA results, and regression coefficients used to test the hypothesis that Enterprise Resource Planning (ERP) integration significantly reduces operational inefficiencies in financial systems in the United States economy. The model summary shows an R Square value of 0.059, which indicates that ERP integration explains 5.9 percent of the variation in operational inefficiencies within financial systems. This suggests that while ERP systems have an influence on inefficiencies, there are still other factors not captured in the model that account for a larger proportion of variation in financial system inefficiencies.

The ANOVA result shows an F value of 9.259 with a significance value of 0.003. Since the p value is less than 0.05, the overall model is statistically significant at the 5 percent level. This means that ERP integration as a predictor provides a meaningful explanation of variations in operational inefficiencies within financial systems and the model is valid for further interpretation.

The constant term in the model has a coefficient value of 19.617 with a significance level of 0.000. This indicates that when ERP integration is absent, operational inefficiencies in financial systems are relatively high and statistically significant. The constant therefore represents the baseline level of inefficiency in the absence of ERP systems, and its significance confirms that inefficiencies exist even without ERP integration.

The coefficient for Enterprise Resource Planning (ERP) Systems is -0.295 with a p value of 0.003. This coefficient represents the marginal effect of ERP integration on operational inefficiencies. A one unit increase in ERP integration leads to a 0.295 unit reduction in operational inefficiencies, holding other factors constant. This negative sign confirms that ERP integration works in the direction of reducing inefficiencies in financial systems. Since the p value is less than 0.05, this effect is statistically significant at the 5 percent level, meaning the reduction in inefficiencies is not due to chance. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted, confirming that ERP integration plays a statistically significant role in reducing operational inefficiencies in financial systems.

V. Discussion Of Finding

The finding that ERP integration significantly reduces operational inefficiencies by improving data processing is consistent with the way ERP systems centralize and standardize financial information across organizational units. This effect occurs because ERP platforms replace fragmented data storage with unified databases, which reduces errors that normally arise from manual entry and duplicated records. The result is faster and more accurate processing of financial information, which explains the negative and significant coefficient ($\beta = -0.295$, $p = 0.003$). This outcome aligns with the work of Sarker (2024), who explained that ERP systems improve data accuracy and reduce manual tasks, thereby strengthening financial processing efficiency. It is also supported by Halimuzzaman and Sharma (2024), whose findings showed that ERP integration with accounting systems improves timeliness and reliability of financial data. Similarly, Shish and Shafa (2023) emphasized that real time data accessibility within ERP systems is a major driver of operational efficiency, while Wulan et al. (2024) found that ERP adoption reduces inefficiencies through improved production and financial data handling. The consistency of these studies suggests that improved data processing is a direct outcome of ERP integration, which naturally reduces operational bottlenecks in financial systems.

The result from the descriptive analysis implies that ERP integration reduces inefficiencies by enhancing coordination across financial processes and departments. This occurs because ERP systems create a shared platform where financial, operational, and administrative units access the same information simultaneously, reducing delays caused by miscommunication or isolated systems. The significant negative effect observed in the

study reflects how better coordination streamlines financial workflows and reduces duplication of effort. This finding is strongly supported by Feng and Ali (2024), who reported that ERP systems improve organizational efficiency through better integration of business operations and coordination of activities. Madanhire and Mbohwa (2016) also found that ERP implementation improved interdepartmental communication and reduced operational delays in manufacturing settings. In addition, Mohamed and Farahat (2019) showed that ERP systems have both direct and indirect effects on operational performance through improved process coordination, while Njue (2025) identified service delivery efficiency and communication performance as key outcomes of ERP integration in banking institutions. These studies collectively explain that improved coordination is a structural outcome of ERP systems, which reduces operational inefficiencies by aligning financial processes across different units.

VI. Conclusion And Recommendation

The results highlight the central role of ERP integration in strengthening the overall effectiveness of financial systems within organizations. By improving data processing and ensuring that information flows seamlessly across departments, ERP integration reinforces the reliability and consistency of financial records, which is essential for maintaining transparency and accountability in a highly regulated environment. The enhanced coordination facilitated by integrated systems reflects a shift from fragmented operational structures toward more unified and synchronized processes, where different functional units operate with shared information and aligned objectives. This also highlights the importance of real-time data availability in modern financial management, as timely access to accurate information supports quicker and more informed decision-making. In this context, ERP integration contributes to reducing delays and minimizing errors that often arise from manual or partially integrated systems. The findings further indicate that technological integration is not merely a support function but a critical driver of operational performance, shaping how organizations manage resources, control financial activities, and respond to dynamic market conditions. Overall, the outcome reinforces the view that digital integration within financial systems is closely tied to organizational efficiency and effectiveness. In line with the findings, the study recommended the following:

1. Chief financial officers and enterprise system governance teams should establish continuous ERP performance auditing mechanisms that go beyond routine system checks by using real operational data to identify hidden inefficiencies such as delayed reconciliations, overlapping approvals, and underutilized modules within the ERP environment.
2. IT strategy units in banks should invest in strengthening ERP integration with emerging data analytics and artificial intelligence tools so that financial data is not only processed but also interpreted in real time to reduce dependency on manual financial interpretation and improve responsiveness in decision environments.

Contribution to Knowledge

This study contributes to the existing body of knowledge by addressing the limited empirical focus on how ERP integration specifically reduces operational inefficiencies within financial systems in the United States context. While Heese and Pacelli (2025) examined ERP outcomes mainly in relation to compliance and misconduct reduction, and Njue (2025) as well as Adesina et al. (2024) focused on banking performance in non US settings, this study extends the discussion by situating ERP effectiveness within the operational realities of the U.S. financial sector. In the same way, Feng and Ali (2024), Wulan et al. (2024), and Madanhire and Mbohwa (2016) provided evidence from manufacturing and industrial environments, which limits their relevance to financial system processes that are shaped by regulatory intensity and data sensitivity. Although Sarker (2024) and Halimuzzaman and Sharma (2024) acknowledged improvements in data accuracy and decision making, their studies did not directly isolate operational inefficiencies as a dependent outcome, nor did they focus on user level evidence within financial institutions. Furthermore, Shish and Shafa (2023) examined ERP capabilities in a broad organizational sense, while Meiryani et al. (2021) and Mohamed and Farahat (2019) emphasized performance outcomes without clearly linking them to inefficiency reduction mechanisms in financial systems. Studies such as Tapang and Azubike (2018) and Oldacre (2016) provided useful insights into financial performance and user adoption but did not sufficiently connect ERP integration to operational inefficiency reduction from the perspective of ERP end users. By using primary data from ERP users in the United States financial sector and focusing on process efficiency, data accuracy, and financial decision making, this study fills a methodological and contextual gap in the literature and provides a more direct explanation of how ERP integration contributes to reducing inefficiencies in financial systems.

Limitations of the Study and Suggestion for Further Studies

The study had some limitations that should be noted. The use of snowball sampling may have introduced bias because respondents were selected through referrals rather than a full random selection, which may limit how well the results represent all ERP users in the United States financial sector. The study also relied on self reported

data from questionnaires, which may be affected by personal opinions or inaccurate responses. In addition, the focus on 150 respondents may not fully capture the diversity of experiences across all financial institutions. Time and resource constraints also limited the depth of data that could be collected and analyzed.

Future studies should consider using a larger and more diverse sample to improve the generalization of findings across the financial sector in the United States. A probability sampling method could also be used to reduce bias and improve representativeness. Researchers may also combine survey data with interviews or system generated data to gain a deeper understanding of ERP performance. It would also be useful to examine other sectors such as healthcare or government to compare how ERP integration affects operational efficiency in different environments. Longitudinal studies could also be carried out to observe changes over time.

References

[1]. Adesina, M. T., Babayemi, T. D., & Adesina, J. M. (2024). Enhancing Financial Efficiency: ERP Applications In The Banking Sector. International Journal Of Science And Research Archive, 12(2), 2081-2093.

[2]. Agbeve, V., Adukpo, T. K., Mensah, N., Appiah, D., & Atisu, J. C. (2025). Comparative Analysis Of Digital Banking And Financial Inclusion In The United States: Opportunities, Challenges And Policy Implications. Asian Journal Of Economics, Business And Accounting, 25(3), 452-467.

[3]. Alao, O. B., Dudu, O. F., Alonge, E. O., & Eze, C. E. (2024). Automation In Financial Reporting: A Conceptual Framework For Efficiency And Accuracy In US Corporations. Global Journal Of Advanced Research And Reviews, 2(02), 040-050.

[4]. Çelik, K., & Ayaz, A. (2022). Validation Of The Delone And Mclean Information Systems Success Model: A Study On Student Information System. Education And Information Technologies, 27(4), 4709-4727.

[5]. Feng, C., & Ali, D. A. (2024). Improving The Organizational Efficiency Of Manufacturing Enterprises-The Role Of Digital Transformation, Resource Planning (ERP), And Business Practices. Journal Of Law And Sustainable Development, 12(3), E2439-E2439.

[6]. Halimuzzaman, M., & Sharma, J. (2024). The Role Of Enterprise Resource Planning (ERP) In Improving The Accounting Information System For Organizations. In Revolutionizing The AI-Digital Landscape (Pp. 263-274). Productivity Press.

[7]. Heese, J., & Pacelli, J. (2025). Enterprise Resource Planning (ERP) System Implementations And Corporate Misconduct. The Accounting Review, 100(1), 291-315.

[8]. Helleiner, E., Dileo, M., & Van't Klooster, J. (2025). Financial Technocrats As Competitive Regime Creators: The Founding And Design Of The Network For Greening The Financial System. Regulation & Governance, 19(3), 901-916.

[9]. Kweh, Q. L., Lu, W. M., Tone, K., & Liu, H. M. (2024). Evaluating The Resource Management And Profitability Efficiencies Of US Commercial Banks From A Dynamic Network Perspective. Financial Innovation, 10(1), 19.

[10]. Lutfi, A., Al-Okaily, M., Alsyouf, A., & Alrawad, M. (2022). Evaluating The D&M IS Success Model In The Context Of Accounting Information System And Sustainable Decision Making. Sustainability, 14(13), 8120.

[11]. Madanhire, I., & Mbohwa, C. (2016). Enterprise Resource Planning (ERP) In Improving Operational Efficiency: Case Study. Procedia Cirp, 40, 225-229.

[12]. Meiryani, Fernando, E., Lindawati, A. S. L., Siagian, P., & Desyanti. (2021, April). The Effect Of Implementation Of Enterprise Resource Planning System On Labor Productivity And Net Profit Margin. In Proceedings Of The 5th International Conference On E-Commerce, E-Business And E-Government (Pp. 66-72).

[13]. Mohamed, G. A., & Farahat, E. R. H. (2019). Enterprise Resource Planning System And Its Impact On Tourism Companies' Operational Performance. Journal Of Sustainable Tourism And Entrepreneurship, 1(1), 69-85.

[14]. Morelli, M. (2023). Managing Relative Regulatory Inefficiencies In Complex Financial Systems. U. Pa. J. Bus. L., 25, 705.

[15]. Njue, D. K. (2025). Enterprise Resource Planning System Integration And Performance Of Commercial Banks In Embu County, Kenya (Doctoral Dissertation, Kenyatta University).

[16]. Nworie, G. O., Ihekwereme, E. C., & Okafor, D. C. (2026). Financial Distress Among Academic Lecturers In Nigerian Universities: A Qualitative Exploration Of Systemic And Individual Factors. Journal Of Economics And Trade, 11(1), 355–366.

[17]. Nworie, G.O., Okafor, T.G. & John-Akamelu, C.R. (2022). Firm-Level Traits And The Adoption Of Computerised Accounting Information System Among Listed Manufacturing Firms In Nigeria. Journal Of Global Accounting, 8(3), 128-148.

[18]. Oldacre, R. R. (2016). Empirical Examination Of User Acceptance Of Enterprise Resource Planning Systems In The United States. Walden University.

[19]. Osuala, C., Okeke, N., Obozokhai, L., & Ifeoluwa, A. (2025). Digital Transformation As A Strategic Tool For Improving Operational Efficiency: Evidence From US Small And Medium Enterprises. Management, 2(12), 8-22.

[20]. Oyewole, O. A. (2026a). Impact Of Cost Control On Profitability Of Small Businesses Units In The US. Journal Of Economics And Trade, 11(1), 196-210.

[21]. Oyewole, O. A. (2026b). Internal Audit Deficiencies As Predictors Of Perceived Fraud Risk: Survey Evidence From Small Business Owners In The United States. Asian Journal Of Economics, Business And Accounting, 26(4), 399-410.

[22]. Sarker, J. (2024). Enterprise Resource Planning (ERP): Opportunities, Benefits And Implementation Challenges In Bangladesh. International Journal Of Science And Business, 42(1), 71-83.

[23]. Shish, Z. H., & Shafa, H. (2023). A Quantitative Study On IT-Enabled ERP Systems And Their Role In Operational Efficiency. International Journal Of Scientific Interdisciplinary Research, 4(4), 62-99.

[24]. Tapang, A. T., & Azubike, J. U. (2018). Effect Of Enterprise Resource Planning Implementation On Financial Performance Of Commercial Banks In Nigeria. Journal Of Accounting And Financial Management, 4(6), 42-55.

[25]. Usmani, U. A., Happonen, A., & Watada, J. (2023, April). ERP Integration: Enhancing Collaboration In Virtual And Extended Enterprises. In World Conference On Information Systems And Technologies (Pp. 161-178). Singapore: Springer Nature Singapore.

[26]. Wulan, T. S., Novika, P. W., Nurvianti, E., & Putra, F. A. (2024). Impact Of ERP System Implementation On Operational And Financial Efficiency In Manufacturing Industry. Journal Of Economic Education And Entrepreneurship Studies, 5(3), 491-501.