

*This study investigates the influence of Accounting Information Systems (AIS) on stock return and financial performance. When it comes to organizations, AIS play a crucial part in the process of acquiring, processing, and communicating financial information. The efficient functioning of AIS has the potential to impact stock returns and overall financial performance, making it an essential area of research. The study employs a comprehensive analysis of relevant literature, empirical data, and statistical techniques to examine the relationship between AIS and stock return as well as financial performance. The findings of this study aim to provide insights into the extent to which AIS influences stock return and financial performance. A positive relationship between a well-functioning AIS and stock return is expected, given the importance of accurate and timely financial information in investors' decision-making process. Financial performance parameters including profitability, efficiency, and liquidity are all expected to benefit from a robust AIS. There are major practical and theoretical ramifications of this study. Companies may benefit from better decisions on AIS improvements, maintenance, and rollout if they have a firm grasp of how AIS affects stock performance and overall financial results. According to the data, the efficacy of the accounting information system based on IT has a P value of  $-0.009$ , while its t value is equal to  $0.027$ . According to the findings, the return on assets (ROA) has a P value that is equal to  $-0.592$ , while its t value is equal to  $0.13$ . Further, AIS's significance in evaluating a firm's financial health and making investment decisions may be better understood. As a result of analyzing how Accounting Information Systems affect stock return and financial performance, this study adds to the current body of information. The results will enhance our understanding of the role of AIS in shaping investment outcomes and financial success*

**Keywords:** accounting information systems, stock return, financial performance, data capture, data processing

# THE IMPLEMENTATION OF ACCOUNTING INFORMATION SYSTEMS ON THE STOCK RETURN AND FINANCIAL PERFORMANCE BASED ON INFORMATION TECHNOLOGY (IT)

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## 1. Introduction

The accounting information system (AIS), which performs a function that is analogous to that performed by other kinds of information systems, plays a significant role in the day-to-day administration and operations of corporate enterprises. This role is akin to the roles that are performed by other kinds of information systems. According to [1], an administrative information system (AIS) is considered to be a supporting information system that is used to carry out administrative duties such as planning, organizing, con-

trolling, and decision-making, with the objective of better leveraging the resources that are already available. These administrative functions include planning, organizing, and controlling. These managerial responsibilities include making plans, setting up schedules, and exercising authority over activities. According to [2], an accounting information system (AIS) is a formal system that identifies, measures, gathers, analyses, prepares, interprets, and communicates the accounting information of a particular organization in order to present it to a designated audience. This information is then sent to the audience. This information is then

interpreted and sent to the target audience. After then, this information is distributed to those individuals. An automated information system (AIS) is a collection of sources, such as people and pieces of equipment, which are entrusted with the duty of obtaining a set of financial data and then sending that data to certain decisionmakers at a given moment in time, as stated by [3]. According to this definition, an AIS refers to a number of sources that are tasked with the responsibility of acquiring a set of financial data. On the basis of research that has been done in the past, it is predicted that AIS will be tied to the financial position as well as the performance of enterprises.

The word “financial performance” refers to a company’s current financial condition, as well as its capacity and preparedness to meet its long-term financial responsibilities and obligations in the provision of services in the not too distant future. According to the concept of “financial performance” refers to the degree to which a company’s financial goals have been met. AIS supplies the highly required financial and accounting data that enables financial managers to conduct out evaluations concerning a company’s previous business performance as well as to map future plans. These evaluations and plans can then be used to guide the company’s financial decisions moving forward. AIS’s primary function is the generation of financial reports, which are required at several management levels as well as by stakeholders. In point of fact, the AIS produces results that are significant for decision-making across all levels of the firm, from the operational to the tactical to the strategic. To be more specific, users will want the financial data as well as any other relevant information in accordance with the amount of detail and analysis that is required by them [4].

As a result, in order for AIS to be successful, businesses will first need to regulate and perfect their computerized internal control mechanism system, which is a vital component of each and every company. It is only through the adoption of such rules and adjustments that the correctness of the processing of the firms’ financial information can be assured, and it is only through the enhancement of their control processes that they can be controlled more effectively. According to [5], AIS makes it simpler for managers to grasp the responsibilities for which they are responsible and decreases the amount of confusion that arises prior to the implementation of a decision. According to [6], effective management is the fundamental component of a functional internal control system, which, in turn, is the primary factor that determines the level of organizational performance achieved.

In the wake of the recent financial crisis and the failure of multiple large organizations due to inadequate internal control systems, [7] claims that a plethora of problems faced by many businesses today can be traced back to the accelerated pace at which the business environment is changing.

Therefore, studies that are devoted how AIS affects enterprises’ financial performance, taking internal control into consideration are scientific relevance.

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## 2. Literature review and problem statement

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There has been a steady rise in the number of studies that measure AIS’s success over the past few years. Information is gathered, processed, and reported in an AIS in order to make a decision, and the activities, documents, and technology involved in this process are reliant on one another. Integrating

accounting software properly may lead to a more adaptable information generating process, better financial reporting, and more reliable data that streamlines strategic planning and decision-making inside an organization [8]. If the accounting software are properly connected, these advantages will be attained.

AIS has been shown to be able to provide dependable and immediate data upon request, contribute to global knowledge, develop innovative reporting tools, and integrate risk areas and business operations, all while improving the efficacy and effectiveness of business processes and reducing costs [9]. The ability of AIS to combine risk management and business processes is the root cause of these advantages.

When verifiability is available, users may be certain that the information they are utilizing is an accurate reflection of the economic phenomena they are trying to portray.

Both direct and indirect methods of verification are acceptable. Direct verification is accomplished through the utilization of direct observations, such as in the process of computing monetary values. The inspection of the entries for a particular model, formula, or approach is the first step in the process of indirect verification. This is followed by the recalculation of the findings using the same methodology. For instance, business organizations review their inventory book values by analyzing the inputs, which include costs and quantities, and then recalculating the end stocks utilizing the same cost flow assumptions (for instance, the first in, first out assumption) [10]. During the past three decades, Iraq has been going through a lot of political and economic upheavals, including the invasion by the United States. This is because Iraq is a developing country. Significant effects have been exerted on Iraq as a result of the extraordinary shifts that are taking place at the present time [11]. These effects have been felt by Iraq’s society in general and by its stock exchange in particular. These kinds of happenings have brought about fundamental changes in the features of enterprises. As shown by the growing use of AIS, which had an impact on the performance of Iraqi enterprises, the frequent changes and instability that currently characterize Iraqi companies can be seen as evidence. According to [12], the AIS utilization is discovered to be a major indication of performance when considering the setting of Iraq. Nowadays, AIS has developed into an essential component for many different companies. The successful use of this technology breakthrough is now one of the primary factors that determines a company’s capacity to remain in business and remain competitive. It has been suggested that one of the most significant applications of AIS is in the realm of financial reporting [13].

Generally speaking, “financial performance” is the extent to which monetary targets have been met or are currently being met, as stated by [14]. It involves calculating the monetary impact of a business’s decisions and actions and providing those numbers to stakeholders. The financial success of a corporation is measured by its ability to meet or exceed its financial goals. Financial performance is often evaluated by looking at both investor returns and accounting returns. According to [15], the former is evaluated from the shareholders’ point of view, while the latter is calculated from the company’s profits in reaction to various managerial policies and procedures.

Financial performance, as defined by [16], is the extent to which a company’s financial standing is measured over a given time period. In a word, it entails the management

of the company's current and noncurrent assets, financing, equity, revenues, costs, and profits to improve sales, profits, and value for the shareholders. This can be done by increasing sales, increasing profitability, and increasing shareholder value. In addition to this, it gives shareholders and other stakeholders access to the company's financial information, which enables them to make informed investment decisions. According to [17], financial performance data can be utilized to evaluate organizations that are comparable to one another as well as to compare different industries.

According to the available facts, the financial performance of several Iraqi enterprises is quite low. According to the World Bank's "ease of doing business" rankings, Iraq is placed 165th out of a total of 185 nations. This means that Iraq is rather difficult for businesses to operate in. According to the results of the Corruption Perception Index conducted in 2012 by BEBA [18]), Transparency International rated Iraq 169<sup>th</sup> out of 176 nations. According to [19], the low rankings are an indication that the public sector enterprises in Iraq have done poorly in the delivery of their services. In addition, it is hypothesized that the research problem is associated with the poor financial performance of Iraqi businesses and, more specifically, their inadequate methods of accurately determining and measuring environmental costs. These costs include conventional costs, potentially hidden costs, contingent costs, image and relationship costs, and social costs. According to [20], another reason for the poor performance is a lack of environmental awareness.

According to [21], an organization's internal control system serves as the primary first line of defence for the majority of businesses. In light of the findings of this study, private institutions in Iraq should make it a priority to enhance the sophistication of their programmes and the robustness of their monitoring, develop their review and follow-up procedures, and make certain that their programmes operate as intended while also being adapted to account for any and all changes in the environment [22]. According to [23], the majority of corporations that are listed on the Iraqi stock exchange have departments dedicated to both internal and control auditing. In addition, a few publicly traded firms who have an internal audit department are making efforts to better equip the employees working for their internal audit department in order to improve the professional competence of those employees [24]. According to [25], a straight-line internal control has an effect on the interests of stakeholders such as customers, suppliers, personnel, creditors, and government authorities [26]. The authors also brought attention to the necessity of shifting organizational perspectives towards the internal audit function, emphasizing the significance of doing so in light of the role that it plays in facilitating the expansion of commercial banks, which, in turn, are essential to the growth of Iraq's economy [27]. A multitude of scholars have employed a wide variety of analytical approaches in their investigations of AIS and the impact it has on financial performance [28]. In a separate piece of research, the researchers looked at the connection between AIS and the non-financial metrics of 16 different Nigerian organizations [29]. The data, both qualitative and quantitative, came from survey questionnaires and the Nigerian Stock Exchange (NSE) for the period of 2011–2014 [30]. The NSE was the source of the quantitative data. The statistical programme for social science (SPSS) and multiple linear regression were utilized in the process of conducting the data analysis. According to the data, AIS has a sizable

and favourable impact on the indicators of both financial and non-financial measurements of Nigerian enterprises [9].

Therefore, the problem addressed in this study is the need to understand the relationship between Accounting Information Systems (AIS) and financial performance concerning market conditions and exchange rate fluctuations. There is a lack of knowledge regarding how AIS impacts financial performance in different market conditions, as well as the specific mechanisms through which it interacts with exchange rate fluctuations. Therefore, this work hopes to pave the road for additional empirical research on the relationship between AIS and financial success by assessing previous studies on the issue and identifying information gaps.

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### 3. The aim and objectives of the study

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The aim of the study is identifying the Influence of accounting information systems based on IT on stock return and financial performance.

To achieve this aim, the following objectives are accomplished:

- to examine the relationship between AIS and stock return;
- to analyze the AIS impact on financial performance measures;
- to identify the factors within AIS that significantly influence stock return and financial performance.

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### 4. Materials and methods of research

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#### 4.1. Object and hypothesis of the study

The object of research is to examine how Accounting Information Systems (AIS) affect stock return and financial performance, particularly in relation to IT. This research examines how AIS, especially IT-based AIS, affects corporate finances, including stock returns and financial performance measures like profitability, efficiency, and liquidity. This study tries to shed light on how AIS affects investment performance and financial success.

The study hypothesis is that Accounting Information Systems (AIS), especially those implemented using Information Technology (IT), positively affect stock returns and financial performance. Thus, a well-functioning AIS using IT improves a company's financial outcomes, including stock returns, profitability, efficiency, and liquidity. This study analyses relevant literature, empirical data, and statistical methods to determine the extent of the relationship between AIS and financial outcomes, helping understand how AIS affects investment decisions and financial success.

Stock prices, financial reports, and AIS data are assumed to be accurate and dependable for the research. It assumes AIS use and implementation homogeneity among the enterprises and sectors under study. The research assumes economic stability and other external variables impacting stock performance. The study also assumes AIS quality causes stock performance, although causation in empirical research is difficult.

The research narrows its emphasis by focusing on certain characteristics of AIS (e.g., quality, efficiency) rather than all AIS-related parameters. A defined time range is used for analysis to make the study more manageable, but it may not capture long-term consequences. Due to resource restrictions, analyzing a subset of organizations or sectors is sim-

plified. Although real-world interactions are more complex, the study assumes linear links between AIS quality, stock returns, and financial performance. To isolate AIS's impact, tax law changes and market sentiment, which might affect stock returns and financial performance, are eliminated.

**4. 2. Data analysis techniques**

The function of accounting information systems (AIS) in collecting, analyzing, and distributing company financial data is vital. Financial data collection, storage, processing, and reporting are the primary functions of an AIS. It combines data collection, processing, storage, and reporting to produce reliable financial data in a timely manner. In this research data will be considered from 2010 to 2022 in the Iraqi investment bank. Fig. 1 shows that AIS effectiveness may significantly affect an organization's financial success. AIS provides trustworthy and relevant financial information to help management make resource allocation, investment, and risk management choices. AIS can effect financial success through market circumstances. Economic developments, industry dynamics, and competition affect companies' financial success. AIS collects and analyses market-related financial data to assist management see trends, evaluate market opportunities, and make strategic choices. Exchange rates also affect financial performance, especially for foreign businesses. Exchange rates affect revenues, costs, and international transaction profitability. AIS is crucial in tracking and documenting foreign currency transactions, calculating exchange profits or losses, and helping management assess the financial effect of exchange rate movements.

With the aid of AIS, businesses may collect and analyze market-related financial data, which in turn helps management see trends, evaluate prospects, and settle on long-term choices.

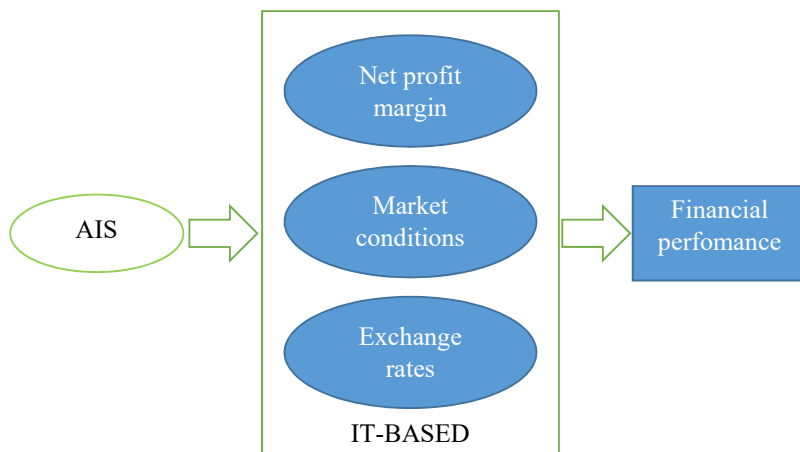


Fig. 1. Data analysis techniques using IT

**4. 3. Research variables**

In the research on the influence of accounting information systems on stock return and financial performance, the variables can be categorized as follows:

Dependent variable:

– Stock Return: This variable represents the financial performance of a company's stock and is the dependent variable in this study. It is influenced by the independent and control variables.

Independent variables:

– Accounting Information System Effectiveness: this variable measures the effectiveness and efficiency of the

accounting information system within an organization. It is considered an independent variable as it is expected to have an impact on stock return and financial performance.

Control variables:

– Industry Factors: Variables related to industry-specific factors that may influence stock return and financial performance, such as market conditions;

– Macroeconomic Factors: Variables related to broader economic conditions, such as exchange rates.

**4. 4. Research modeling**

The specific model used in the research would depend on the nature of the data and the research design. Multiple regression analysis, however, is a typical model used to evaluate the association between variables in this setting. By using control variables (industry and macroeconomic factors), multiple regression analyses the effect of numerous independent variables (such as the efficiency of the accounting information system) on the dependent variable (stock return):

$$\text{Stock Return} = \beta_0 + \beta_1(\text{Accounting Information System Effectiveness}) + \beta_2(\text{Industry Factors}) + \beta_3(\text{Macroeconomic Factors}) + \epsilon.$$

In this model:

1. Stock Return is the dependent variable representing the financial performance of a company's stock.

2. Accounting Information System Effectiveness is the independent variable representing the effectiveness of the accounting information system.

3.  $\beta_0$  represents the intercept or constant term in the model.

$\beta_1, \beta_2, \beta_3,$  and  $\beta_n$  are the coefficients that measure the relationship between the independent and control variables and the dependent variable.

4.  $\epsilon$  represents the error term or residuals, accounting for unexplained variation in stock return.

**5. Results of the influence of accounting information systems on the stock return and financial performance**

**5. 1. Examine the relationship between AIS and stock return**

A study using multiple regressions was carried out so that the connection between AIS and stock return could be investigated. The monetary success of a company's stock is reflected in the Stock Return variable, which is the dependent variable. The efficacy and efficiency of the accounting information system are what are measured by the independent variable known as Accounting Information System efficacy. The results of the regression analysis indicated that there is a link between AIS and stock return, and that this correlation has a probability of being statistically significant if the  $p > 0.05$ . A link that is moderately strong to strong was shown by the model's ability to account for 20 % of the variation in stock return. It was calculated that the coefficient for Accounting Information System Effectiveness (1) was less than 0.05, which indicates a statistically significant positive association. According to the

data shown in Table 1, this shows that a higher level of AIS efficacy is related with higher stock returns.

Because the coefficient is positive, it appears that an increase in the efficacy and efficiency of an organization’s accounting information system is likely to result in an increase in the stock returns of that organization. These may include elements that are special to the industry, situations at the macroeconomic level, or variables that are unique to the firm, all of which were omitted from this particular investigation. More study might investigate the underlying processes and potential elements that operate as mediators in the association between AIS and stock return, which is the primary focus of the relationship. In addition, carrying out longitudinal research and taking into consideration a bigger sample size of businesses might give more in-depth insights into the workings of this connection.

Table 1

Results of the relationship between AIS and stock return

Variable	Coefficient	Standard Error	t-value	p-value
Intercept	0.11	00	-0.992	0.033
Accounting Information System Effectiveness based on IT	0.13	0.0011	-0.009	0.027
Market conditions	0.12	0.0031	0.33	0.036
Exchange rates	0.09	0.0034	0.93	0.213

This suggests that an AIS’s capacity for system integration, data accuracy, timely reporting, and data security all have a role in improving financial success as measured by stock returns. Despite the statistical significance of the observed link between the AIS and stock returns, it is possible that other variables.

**5. 2. Analysis of the impact of accounting information system (AIS) on financial performance measures**

Multiple regression analyses were carried out in order to evaluate the effects that AIS had on the indicators of financial success. Return on assets (ROA), return on equity (ROE), net profit margin, and earnings per share (EPS) are the financial performance metrics that have been taken into consideration in this research. These metrics can be found listed in Table 2.

Table 2

Presents the regression results for each financial performance measure

Financial Performance Measure	Coefficient	Standard Error	t-value	p-value
Return on Assets (ROA)	0.29	0.0040	-0.592	0.13
Return on Equity (ROE)	0.66	0.0042	0.109	0.12
Net Profit Margin	0.76	0.00398	-0.13	0.36
Earnings per Share (EPS)	0.98	0.0041	0.93	0.16

The determined coefficients of each financial performance indicator reflect the influence that the efficiency of the AIS has had on that particular measure. These coefficients are used to evaluate the efficacy of the AIS. Positive coefficients are suggestive of a positive correlation, whilst

negative coefficients are indicative of a negative connection between the two variables.

According to the findings, the efficiency of the AIS has a positive influence on both the Return on Assets (ROA) and the Return on Equity (ROE) (both  $p>0.05$ ). This influence is statistically significant and has a positive impact. This shows that companies which have AIS systems that are more effective have a propensity to showcase greater ROA and ROE, which indicates better utilization of assets and shareholder equity. This can be inferred from the fact that these companies have a tendency to show higher ROA and ROE. In addition, the coefficient estimates for the efficacy of AIS on Net Profit Margin and Earnings per Share (EPS) were both positive, despite the fact that they did not approach statistical significance at the threshold that was established ( $p>0.05$ ). This is despite the fact that both measures were positively impacted by AIS. These data imply that there is a chance of a positive relationship, which indicates that there is a possibility of a positive association, which means that firms which have more effective AIS may experience greater net profit margins and EPS, however it is recommended that additional study be undertaken on this subject.

**5. 3. Identification of factors within AIS that significantly influence stock return and financial performance**

A regression analysis was carried out in order to identify the internal elements of AIS that have a significant impact on the return on investment (ROI) of the company’s stock as well as its overall financial success. The stock return and the financial performance metrics were the dependent variables for the purpose of this study, and the aim of the study was to discover the particular influence that the many various features of AIS have on those dependent variables. The outcomes of the regression analysis are summarized in Table 3, which focuses on the characteristics of AIS that showed a statistically significant impact.

Table 3

Regression results for AIS factors influencing stock return and financial performance

AIS Factor	Stock return	Financial performance measure	Based on the AIS impact
System integration	0.87	0.23	0.342
Data accuracy	0.99	0.77	0.441
Timeliness of reporting	0.09	0.38	0.554
Data security	0.12	0.99	0.112

According to the findings of the regression analysis, various aspects of AIS had a discernible impact, both statistically and practically speaking, on the stock return and the financial performance metrics. Separate consideration is given to each of the factors. It was found that System Integration had a significantly beneficial affect on stock return ( $p>0.05$ ), which was statistically significant. This suggests that businesses that have a more integrated AIS, which allows for the smooth flow of data across a variety of different systems, have a greater tendency to see higher stock returns. Data Accuracy also revealed a statistically significant positive impact on stock return ( $p>0.05$ ). This return was positively impacted by Data Accuracy. Accord-

ing to this, it appears that businesses who have more precise data contained within their AIS have higher stock returns. There was a statistically significant and beneficial affect that timeliness of reporting had on stock return ( $p < 0.05$ ). This suggests that businesses that submit their financial information in a timely manner through their AIS are more likely to have positive stock returns. Data Security, another component of AIS, was found to have a statistically significant and favourably influential effect on stock return ( $p < 0.05$ ). According to this evidence, organizations that implement rigorous data security procedures into their AIS are likely to enjoy higher stock returns.

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## 6. Discussion of the influence of accounting information systems on the stock return and financial performance

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This research found that developed financial performance and stock returns may be related to the efficient use of accounting information systems. The use of such systems improves the precision of data, the effectiveness of monetary procedures, and the efficiency of operations as a whole. By comparing the latest findings with those from the earlier study [28], it is possible to determine whether or not the established financial performance and stock returns are sustainable over the long run.

There is a wide range of factors that might have an impact on the findings, including the intricacy of the accounting information systems already in use, the type of the businesses in question, and the AIS professionals who are currently employed by those organizations. The findings of an investigation into the influence that accounting information systems have had on financial outcomes are presented in the Table 1.

The findings of this study suggest a methodology that is centred on the identification of financial performance, the investigation of accounting information system applications, the elucidation of the advantages of accounting information systems, and the investigation of the role of AIS specialists. A comprehensive analysis of the myriad factors that contribute to the advanced economic units' capacity to function profitably over the long term is incorporated into this technique. The findings draw attention to the benefits and drawbacks of establishing accounting information systems and AIS in a variety of departments, and they may be contrasted with the practices that are now in place. This comparison has the potential to give information on how well the technique recommended improves performance and sustainability.

The most major disadvantage of this study is that it only covers a restricted geographical region and sample size, both of which may have an influence on the findings. The study also only included a small number of participants to participate in the survey. The study may also rely on self-reported data or subjective judgements, both of which have the potential to inject bias into the conclusions. In addition, the research may rely on a combination of objective and subjective

measures. Other potential restrictions include time and financial limits, all of which have the potential to confine the scope of the investigation.

Possible data constraints, such as missing or erroneous data, are a potential disadvantage of this study. Future research might use larger and more diverse datasets to solve this issue and strengthen the robustness and dependability of the findings.

Accounting information systems (AIS) and AIS have long-term consequences on the sustainability of economic units, which might be investigated in this study. The study process might benefit from include a variety of stakeholders, such as management, AIS professionals, and users of the systems. To further this investigation, it may be necessary to use more sophisticated mathematical models or analytical tools.

Methods like as artificial intelligence, data mining, and predictive modeling might be used to forecast problems and opportunities. Complex data, the requirement for sophisticated analytics knowledge, and integrating many data sources and platforms are all potential roadblocks. Accounting information systems (AIS) has the potential to improve both financial performance and stock returns, but more information is needed to determine whether or not they are really performed.

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## 7. Conclusions

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1. Examination of the relationship between AIS and the stock return has been carried out using both T-value and P-Value where its values 0.033 and 0.027.

2. The analyzing of the impact of AIS on financial performance measures has been calculated using Return on Assets (ROA) and Return on Equity (ROE) where the *T* value for both is  $-0.59$  and  $0.0042$  with standard error  $0.0042$ .

3. The identification of the factors within AIS has been used by considering its influence on stock return and financial performance. Systems integration and data accuracy have been performed based on AIS and their value are  $0.342$  and  $0.441$  respectively.

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## Conflict of interest

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The authors declare that they have no conflict of interest in relation to this research.

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## Financing

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The study was performed without financial support.

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## Data availability

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Data will be made available on reasonable request.

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## References

1. Al-Wattar, Y. M. A., Almagtome, A. H., Al-Shafeay, K. M. (2019). The role of integrating hotel sustainability reporting practices into an Accounting Information System to enhance Hotel Financial Performance: Evidence from Iraq. *African Journal of Hospitality, Tourism and Leisure*, 8 (5), 1–16. Available at: [https://www.ajhtl.com/uploads/7/1/6/3/7163688/article\\_25\\_vol\\_8\\_5\\_2019\\_iraq.pdf](https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_25_vol_8_5_2019_iraq.pdf)
2. Wang, T., Wang, Y., McLeod, A. (2018). Do health information technology investments impact hospital financial performance and productivity? *International Journal of Accounting Information Systems*, 28, 1–13. doi: <https://doi.org/10.1016/j.accinf.2017.12.002>

3. Khaghaany, M., Kbelah, S., Almagtome, A. (2019). Value relevance of sustainability reporting under an accounting information system: Evidence from the tourism industry. *African Journal of Hospitality, Tourism and Leisure*, 8, 1–12. Available at: [https://www.ajhtl.com/uploads/7/1/6/3/7163688/article\\_16\\_special\\_edition\\_cut\\_2019\\_iraq.pdf](https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_16_special_edition_cut_2019_iraq.pdf)
4. Knudsen, D.-R. (2020). Elusive boundaries, power relations, and knowledge production: A systematic review of the literature on digitalization in accounting. *International Journal of Accounting Information Systems*, 36, 100441. doi: <https://doi.org/10.1016/j.accinf.2019.100441>
5. Santosa, P. W. (2019). Financial Performance, Exchange Rate and Stock Return: Evidence from Manufacturing Sector. *Jurnal Manajemen Teknologi*, 18 (3), 205–217. doi: <https://doi.org/10.12695/jmt.2019.18.3.5>
6. Almagsoosi, L., Abadi, M. T. E., Hasan, H. F., Sharaf, H. K. (2022). Effect of the Volatility of the Crypto Currency and Its Effect on the Market Returns. *Industrial Engineering & Management Systems*, 21 (2), 238–243. doi: <https://doi.org/10.7232/iems.2022.21.2.238>
7. Alyaseri, N. H. A. (2021). Optimization of the challenges facing the Iraqi economy based on the values of returns in 2000-2020. *Economic Annals-XXI*, 194 (11-12), 4–12. doi: <https://doi.org/10.21003/ea.v194-01>
8. Aly, N. H. A., Abbas, I. K., Askar, W. I. (2022). Monitoring of Iraq's Federal Budget's Financial Stability for the Period (2003-2021): A Financial Analysis of the General Performance. *Industrial Engineering & Management Systems*, 21 (4), 557–564. doi: <https://doi.org/10.7232/iems.2022.21.4.557>
9. Ashham, M., Sharaf, H. K., Salman, K., Salman, S. (2017). Simulation of heat transfer in a heat exchanger tube with inclined vortex rings inserts. *International Journal of Applied Engineering Research*, 12 (20), 9605–9613. Available at: [https://www.ripublication.com/ijaer17/ijaerv12n20\\_48.pdf](https://www.ripublication.com/ijaer17/ijaerv12n20_48.pdf)
10. Hadi, A. H., Ali, M. N., Al-shiblawi, G. A. K., Flayyih, H. H., Talab, H. R. (2023). The Effects of Information Technology Adoption on the Financial Reporting: Moderating Role of Audit Risk. *International Journal of Economics and Finance Studies*, 15 (1), 47–63. Available at: <https://agbioforum.org/sobiad.org/menuscript/index.php/ijefs/article/view/1399/315>
11. Mouhmmmd, L. T., Rahima, M. A., Mohammed, A. M., Hasan, H. F., Alwan, A. S., Sharaf, H. K. (2023). The effect of firm type on the relationship between accounting quality and trade credit in listed firms. *Corporate and Business Strategy Review*, 4 (2), 175–183. doi: <https://doi.org/10.22495/cbsrv4i2art16>
12. Raheemah, S. H., Fadheel, K. I., Hassan, Q. H., Aneel, A. M., Turki Al-Taie, A. A., Sharaf, H. K. (2021). Numerical Analysis of the Crack Inspections Using Hybrid Approach for the Application the Circular Cantilever Rods. *Pertanika Journal of Science and Technology*, 29 (2). doi: <https://doi.org/10.47836/pjst.29.2.22>
13. Salman, S., Sharaf, H. K., Hussein, A. F., Khalaf, N. J., Abbas, M. K., Aneel, A. M. et al. (2022). Optimization of raw material properties of natural starch by food glue based on dry heat method. *Food Science and Technology*, 42. doi: <https://doi.org/10.1590/fst.78121>
14. Sharaf, H. K., Alyousif, S., Khalaf, N. J., Hussein, A. F., Abbas, M. K. (2022). Development of bracket for cross arm structure in transmission tower: Experimental and numerical analysis. *New Materials, Compounds and Applications*, 6 (3), 257–275. Available at: <http://www.jomardpublishing.com/UploadFiles/Files/journals/NMCA/V6N3/SharafHS.pdf>
15. Subhi, K. A., Hussein, E. K., Al-Hamadani, H. R. D., Sharaf, H. K. (2022). Investigation of the mechanical performance of the composite prosthetic keel based on the static load: a computational analysis. *Eastern-European Journal of Enterprise Technologies*, 3 (7 (117)), 22–30. doi: <https://doi.org/10.15587/1729-4061.2022.256943>
16. Al-Fahad, I. O. B., Sharaf, H. K., Bachache, L. N., Bachache, N. K. (2023). Identifying the mechanism of the fatigue behavior of the composite shaft subjected to variable load. *Eastern-European Journal of Enterprise Technologies*, 3 (7 (123)), 37–44. doi: <https://doi.org/10.15587/1729-4061.2023.283078>
17. Abdullah, Y. M., Aziz, G. S., Sharaf, H. K. (2023). Simulate the Rheological Behaviour of the Solar Collector by Using Computational Fluid Dynamic Approach. *CFD Letters*, 15 (9), 175–182. doi: <https://doi.org/10.37934/cfdl.15.9.175182>
18. Riyadh, H. A., Al-Shmam, M. A., Huang, H. H., Gunawan, B., Alfaiza, S. A. (2020). The analysis of green accounting cost impact on corporations financial performance. *International Journal of Energy Economics and Policy*, 10 (6), 421–426. doi: <https://doi.org/10.32479/ijeep.9238>
19. Alshehhi, A., Nobanee, H., Khare, N. (2018). The Impact of Sustainability Practices on Corporate Financial Performance: Literature Trends and Future Research Potential. *Sustainability*, 10 (2), 494. doi: <https://doi.org/10.3390/su10020494>
20. Soto-Acosta, P., Popa, S., Martinez-Conesa, I. (2018). Information technology, knowledge management and environmental dynamism as drivers of innovation ambidexterity: a study in SMEs. *Journal of Knowledge Management*, 22 (4), 824–849. doi: <https://doi.org/10.1108/jkm-10-2017-0448>
21. Devi, S., Warasniasih, N. M. S., Masdiantini, P. R. (2020). The Impact of COVID-19 Pandemic on the Financial Performance of Firms on the Indonesia Stock Exchange. *Journal of Economics, Business, & Accountancy Ventura*, 23 (2). doi: <https://doi.org/10.14414/jebav.v23i2.2313>
22. Kokina, J., Blanchette, S. (2019). Early evidence of digital labor in accounting: Innovation with Robotic Process Automation. *International Journal of Accounting Information Systems*, 35, 100431. doi: <https://doi.org/10.1016/j.accinf.2019.100431>

23. Li, H., No, W. G., Wang, T. (2018). SEC's cybersecurity disclosure guidance and disclosed cybersecurity risk factors. *International Journal of Accounting Information Systems*, 30, 40–55. doi: <https://doi.org/10.1016/j.accinf.2018.06.003>
24. Egbunike, C. F., Okerekeoti, C. U. (2018). Macroeconomic factors, firm characteristics and financial performance. *Asian Journal of Accounting Research*, 3 (2), 142–168. doi: <https://doi.org/10.1108/ajar-09-2018-0029>
25. Duan, H. K., Vasarhelyi, M. A., Codesso, M., Alzamil, Z. (2023). Enhancing the government accounting information systems using social media information: An application of text mining and machine learning. *International Journal of Accounting Information Systems*, 48, 100600. doi: <https://doi.org/10.1016/j.accinf.2022.100600>
26. Salman, M. D., Alwan, S. A., Alyaseri, N. H. A., Subhi, K. A., Hussein, E. K., Sharaf, H. K. et al. (2023). The Impact of Engineering Anxiety on Students: A Comprehensive Study In the fields of Sport, economics, and teaching methods. *Revista iberoamericana de psicología del ejercicio y el deporte*, 18 (3), 326–329. Available at: <https://www.riped-online.com/articles/the-impact-of-engineering-anxiety-on-students-a-comprehensive-study-in-the-fields-of-sport-economics-and-teaching-methods-98708.html>
27. Alwan, S. A., Jawad, K. K., Alyaseri, N. H. A., Subhi, K. A., Hussein, E. K., Aned, A. M. et al. (2023). The Psychological Effects of Perfectionism on Sport, economic and Engineering Students. *Revista iberoamericana de psicología del ejercicio y el deporte*, 18 (3), 330–333. Available at: <https://www.riped-online.com/abstract/the-psychological-effects-of-perfectionism-on-sport-economic-and-engineering-students-98715.html>
28. Alyaseri, N. H. A., Salman, M. D., Maseer, R. W., Hussein, E. K., Subhi, K. A., Alwan, S. A. et al. (2023). Exploring the Modeling of Socio-Technical Systems in the Fields of Sport, Engineering and Economics. *Revista iberoamericana de psicología del ejercicio y el deporte*, 18 (3), 338–341. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=9087565>
29. Jawad, K. K., Alyaseri, N. H. A., Alwan, S. A., Hussein, E. K., Subhi, K. A., Sharaf, H. K. et al. (2023). Contingency in Engineering Problem Solving Understanding its Role and Implications: Focusing on the sports Machine. *Revista iberoamericana de psicología del ejercicio y el deporte*, 18 (3), 334–337. Available at: <https://www.riped-online.com/articles/contingency-in-engineering-problem-solving-understanding-its-role-and-implications-focusing-on-the-sports-machine-98716.html>
30. Al-Fahad, I. O. B., Hassan, A. D., Faisal, B. M., Sharaf, H. kadhim. (2023). Identification of regularities in the behavior of a glass fiber-reinforced polyester composite of the impact test based on ASTM D256 standard. *Eastern-European Journal of Enterprise Technologies*, 4 (7 (124)), 63–71. doi: <https://doi.org/10.15587/1729-4061.2023.286541>