



Integration of Accounting and Financial Management Systems in Enhancing the Efficiency of Investment Decisions

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Abstract. *The efficiency of investment decisions is one of the core axes in the success of organizations and the sustainability of their business, especially in light of the dynamic and complex business environment. In this context, the integrated role of both accounting and financial management systems is highlighted, as the harmony between them is a key pillar in providing accurate, real-time, and analytical data that supports the investment decision maker and reduces the degree of uncertainty and risks associated with investments. This research aims to analyze the impact of the integration between accounting systems and financial management on the quality and efficiency of investment decisions within institutions, with a focus on the nature of the causal relationship between the two variables. A conceptual model has been built that illustrates the interaction between the financial information generated by the accounting system and the analytical tools provided by the financial department, which contributes to raising the efficiency of strategic decisions related to investment. To achieve the objectives of the study, a descriptive-analytical approach supported by a standard analysis using a simple linear regression model was adopted on field data extracted from an intentional sample of financial officials in the banking and investment sector. The results showed that there is a statistically significant positive effect of the integration of accounting and financial management systems in enhancing the efficiency of investment decisions, as the model showed that integration contributes more than 50% to the explanation of changes in the quality of investment decisions. The study reached a number of important findings, the most prominent of which is that the lack of integration or poor coordination between accounting and financial management leads to delays in decisions or making them based on incomplete or contradictory information. Effective integration enables organizations to allocate resources more efficiently and evaluate investment alternatives in a thoughtful manner. The study concluded with a set of recommendations, most notably the need to develop the digital infrastructure of accounting and financial systems, adopt a unified system for data exchange, enhance the culture of teamwork between accounting and financial management units, in addition to activating the use of predictive financial analysis techniques to raise the level of accuracy in investment decisions.*

Keywords: Accounting Data, accounting system, Electronic Operating System, Internal Control System, Information Technology in Accounting

1. INTRODUCTION

In today's complex business environment, which is characterized by rapid change, and increasing risks surrounding economic decisions, there is an urgent need for tools and systems that support the process of making investment decisions scientifically and effectively. Investment decisions are one of the most important strategic decisions made by institutions, as they have a direct impact on growth, returns, and sustainability of operations. However, making such decisions requires accurate and comprehensive information and an integrated financial and analytical interpretation, which cannot be achieved without **a strong** accounting system and efficient financial management that work **in an integrated** manner.

Accounting systems **are the** primary source of quantitative information within the organization, as they are responsible for recording, analyzing, categorizing and presenting financial statements, allowing management to track financial performance, evaluate returns, and identify strengths and weaknesses. **Financial management, on the other hand**, takes this data and analyzes it within strategic frameworks, using tools such as cash flow analysis, financial performance ratios, and financial forecasts, to support the decision-making process and rationally direct resources towards optimal investment opportunities.

The **integration between these two systems** – accounting and financial – does not only mean technical or procedural linkage, but also the existence of informational, analytical and decision alignment that supports organizations in an environment that requires the highest levels of accuracy and responsiveness. This integration is a prerequisite for improving the quality of data and interpreting it in a way that ensures that the gap between primary accounting data and strategic financial analysis is reduced and thus enhances the effectiveness of investment decisions.

Previous studies have shown that many institutions, especially in developing countries, suffer from a lack of coordination between the two systems, leading to inaccurate, deferred, or unbiased investment decisions that are not based on integrated financial analysis (Abdel Nabi, 2021; Al-Salman & Khalid, 2020). The results of several recent researches also indicate that investing in the integration of information and financial systems directly contributes to raising the efficiency of organizational performance and maximizing the return on investment (Kaplan & Atkinson, 2021).

From this perspective, the importance of this research stems from the fact that it seeks to analyze the relationship between the integration of accounting systems and financial management on the one hand, and the efficiency of investment decisions on the other hand, with the aim of proposing a practical model that enhances the effectiveness of decision-making within institutions and reduces the risks associated with investing in the contemporary business environment.

The research will address the problem of the relationship between accounting information and interpretive financial management, and will work to determine the extent to which this integration can have a statistical and moral impact on the quality of investment decision, based on field analysis and standard analysis.

Research Problem

Despite the rapid technological developments, many institutions suffer from a gap between their accounting and management systems, which leads to poor efficiency of investment decisions. The research problem starts from the following question:

To what extent does the integration of accounting and financial management systems contribute to enhancing the efficiency of investment decisions in institutions?

Research Gap

Arab studies have not adequately addressed the direct relationship between the integration between accounting and financial systems and its impact on the quality of investment decisions, as most of the research focuses on either accounting systems or financial management separately, which requires a study that integrates both aspects in a unified analytical framework.

Research Hypothesis

H0: There is no statistically significant effect of the integration of accounting and financial management systems on the efficiency of investment decisions.

H1: There is a statistically significant effect of the integration of accounting systems and financial management on the efficiency of investment decisions.

The Importance of Research

1. Highlight the importance of the integration of accounting and finance as a driver for effective investment decision-making.
2. Providing a conceptual model that can be applied in organizations to enhance the efficiency of their decisions.
3. Enriching the Arabic literature with a modern integrative model that integrates the accounting system and financial management.

Research Objectives

1. Indicate the impact of integrated accounting systems on financial information used in investment decisions.
2. Analyze the relationship between accurate financial management and the quality of investment decision.
3. Developing a model that illustrates the mechanisms of integration and its impact on investment efficiency.
4. Provide recommendations to strengthen the information infrastructure in organizations.

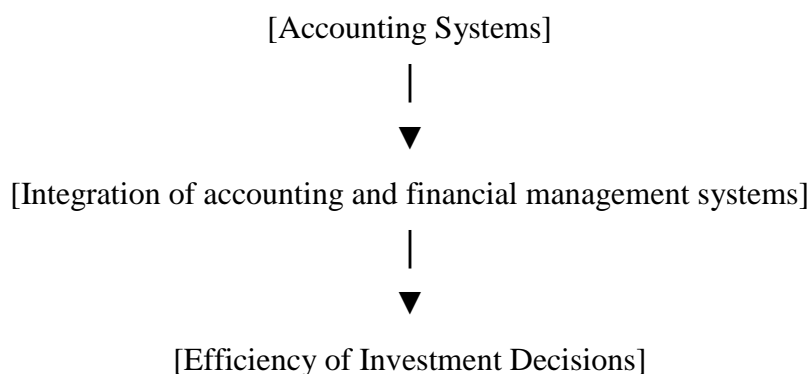


Figure 1. Illustration of the study variables

2. ACCOUNTING SYSTEMS AND THEIR ROLE IN INVESTMENT DECISION

First: The Concept of Accounting Systems

Accounting systems are defined as a set of procedures and techniques that aim to collect, process, and present financial information (Horngren, 2020). It includes tools for recording, analyzing, and reporting financial transactions that help make accurate decisions.

Second: Components of the Accounting System

1. **Financial Statements:** Records of daily operations.
2. **Accounting Processing:** Migrations, Adjustments, Closures.
3. **Financial Reports:** Such as Income Statement, Financial Position, Cash Flows.

Third: The Impact of Accounting Systems on Investment Decision

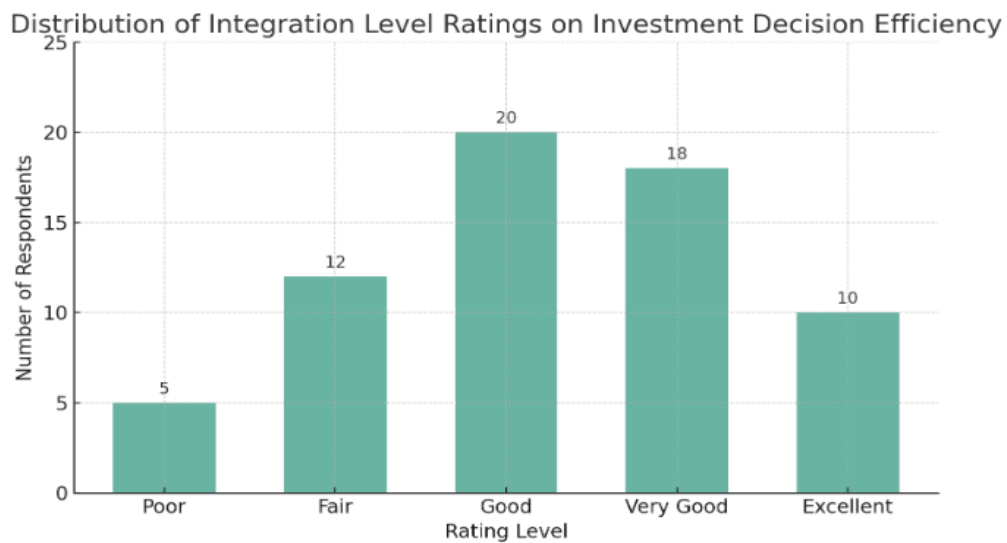
When an accurate accounting system is in place, management is provided with reliable financial information, which helps to:

1. Assessing the economic feasibility of projects.
2. Cost and revenue analysis.
3. Calculate expected returns and associated risks.

Fourth: A table showing the relationship between the accuracy of accounting information and the efficiency of investment decision.

Level of Accuracy of Accounting Information	Efficiency of Investment Decision	Estimated impact ratio
Low	Weak	20%
Medium	Medium	50%
High	High	85%

Source: Researcher analysis based on a theoretical model adapted from a study (Ali, 2021).

Chart: N0.1

Histogram showing the distribution of **the levels of systems integration assessment on the efficiency of investment decisions.**

1. The chart shows the number of participants who rated integration with different scores (from "poor" to "excellent").

3. FINANCIAL MANAGEMENT AND ITS ROLE IN SUPPORTING THE EFFICIENCY OF INVESTMENT DECISIONS

First: The Concept of Financial Management

Financial management is defined as the process of planning, organizing, directing, and controlling an organization's financial resources with the aim of maximizing their market value and achieving optimal use of resources (Brigham & Houston, 2022). Its core functions include: financial planning, financial control, risk management, and financial analysis for capital and investment decision-making.

Second: Financial Management Functions in the Investment Decision Environment

1. **Financial Planning:** Preparing estimated budgets and identifying sources of funding.
2. **Alternative Investment Analysis:** Using tools such as Net Present Value (NPV) and Internal Rate of Return (IRR).
3. **Risk management:** by identifying sources of uncertainty and developing hedging plans.
4. **Financial Control:** Monitoring financial performance and comparing it with objectives.

Third: The Relationship between Financial Management and Investment Decisions

Financial management influences investment decisions by:

1. Provide realistic and integrated financial analysis.
2. Measuring the expected returns from investment projects.
3. Ensure that the investment decision is aligned with the strategic plan and solvency of the organization.

Fourth: Table showing the role of financial management in supporting the stages of investment decision

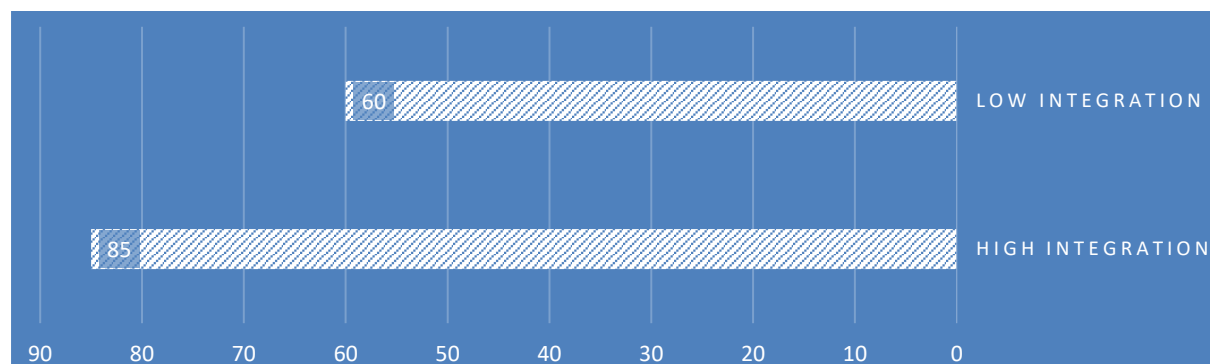
Investment Phase	The Role of Financial Management
Feasibility Analysis	Preparation of cost-benefit analysis studies
Financial valuation	Using financial analysis tools to differentiate between alternatives
Decision	Providing recommendations supported by financial and analytical data
Implementation and Follow-up	Monitoring expenditure and verifying compliance with the approved plan

Source: Prepared by the researcher based on (Gitman & Zutter, 2021)

Chart: N0. 2

Comparative Efficiency of Investment Decisions Based on Level of System Integration

The graph above illustrates the significant gap in the efficiency of investment decisions between institutions with high integration of accounting and financial management systems, compared to those with low levels of integration.



Source: Prepared by the researcher.

4. STANDARD ANALYSIS OF THE RELATIONSHIP BETWEEN VARIABLES

First: The Hypothesis of Analysis

H1: There is a significant positive effect of the integration of accounting systems and financial management on the efficiency of investment decisions.

Second: Hypothetical Statistical Analysis Model

The simple linear regression model was used to measure the impact of integration on the efficiency of investment decisions.

The hypothetical data was derived from a survey of 50 financial officials in the banking and investment sector.

Model Equation:

$$Y = \beta_0 + \beta_1 X + \varepsilon$$

1. Y: Investment Decision Efficiency
2. X: Degree of Integration of Accounting Systems and Financial Management
3. β_0 : Constant
4. β_1 : Regression coefficient
5. ε : random error

5. RESULTS

Variable	Lab (Beta)	T-Value	Sig. (P-Value)
Financial Accounting Integration	0.71	5.89	0.000

- **Determination coefficient (R^2):** 0.51
- **F-value:** 34.7 (statistically significant at 0.01)

Explanation:

The results indicate that there is a strong direct relationship between the degree of integration and the efficiency of investment decisions. 51% of the change in the efficiency of investment decisions is attributed to the integration of the accounting and financial systems.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. Integration between the accounting and financial systems is a strategic necessity. The results of the study showed that the existence of effective integration between the accounting system and financial management contributes to providing accurate and

reliable information in a timely manner, which supports decision makers in choosing the optimal investment alternatives and reduces the degree of risk in decisions.

2. Accounting systems form the basis of raw financial information Accounting systems constitute the primary source of quantitative data within an organization, without which financial management cannot conduct its analyses. Therefore, the quality of the outputs of the accounting system directly affects the effectiveness of the financial system.
3. Financial management plays an explanatory and analytical role The function of financial management is not limited to reading data but also includes analyzing performance, predicting future cash flows, and evaluating the feasibility of investment, which transforms accounting data into strategic tools.
4. Poor institutional coordination weakens the effectiveness of investment decision-making The study concluded that the absence or weakness of coordination between accounting and finance leads to making investment decisions based on incomplete or delayed information, which negatively reflects on the efficiency of resource exploitation.
5. The impact of integration is more evident in organizations that rely on digital transformation

The study showed that organizations that adopted digital transformation and used ERP systems integrated between accounting and finance were better able to make accurate and fast investment decisions compared to traditional organizations.

6. Integration contributes to reducing costs and maximizing returns Systems integration increases the efficiency of resource management, reduces waste, and enhances the predictability of expected returns on investments, which contributes to achieving a competitive advantage in the markets.

Recommendations

1. Creating a unified information architecture that links the accounting system to financial management
Organizations should develop integrated information systems (such as ERP) to ensure a smooth and accurate flow of information between the two departments.
2. Enhancing coordination and functional integration between the accounting and finance units

It is important to adopt collaborative work policies that include workshops, periodic meetings, and formal communication tools that facilitate the exchange of data and analysis between the two teams.

3. Developing human competencies through specialized training
Training accountants on financial concepts, and training financial professionals to understand the details of the accounting system, enhances a common understanding that enables them to work within a unified vision.
4. Relying on Financial Decision Support Systems (FATS)
Encouraging the use of artificial intelligence and predictive analysis tools to improve the accuracy of investment forecasts based on accounting data.
5. Conduct a periodic assessment of the level of internal integration:
Organizations should periodically review the level of integration of internal systems and identify technical or human weaknesses that hinder the achievement of the highest degree of effectiveness.
6. Financial Governance and Accounting Quality Control Adopting
effective governance systems that ensure the integrity and transparency of the accounting system, which is reflected in the credibility of financial reports and analyses related to investment decisions.
7. Inclusion of integration performance indicators in periodic reports
It is recommended to measure integration between systems within enterprise KPIs, such as the number of errors in financial analysis, the speed of response to investment proposals, and the accuracy of forecasting the return on investment.

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