

INTERNAL AUDIT AS A MECHANISM FOR IMPROVING THE EFFICIENCY OF CASH AND LIQUIDITY MANAGEMENT

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ABSTRACT

This study investigates the strategic role of internal audit (IA) in enhancing the efficiency of cash and liquidity management within industrial companies, addressing the critical need for financial stability amidst increasing economic challenges. Specifically, it analyzes how IA functions as a key mechanism for optimizing cash flow, mitigating financial risks, and ensuring regulatory compliance. The research adopts a Descriptive-Analytical approach combined with a case study methodology, focusing on Al-Jayid Food Manufacturing Company. Primary data were collected through semi-structured interviews with financial managers and internal auditors, while secondary data involved the analysis of financial reports and an extensive review of prior academic literature. The findings confirm that a robust internal audit function significantly contributes to enhancing cash management efficiency. IA successfully identified critical liquidity challenges (e.g., a 60-day collection period and short-term payment pressure) and provided actionable recommendations. The implementation of these recommendations led to tangible improvements, including a 25% increase in financial liquidity and a 20% reduction in bad debts. The study also highlights that modern technology (AI and Big Data) adoption, coupled with overcoming key challenges like data inaccuracy and resistance to change, is essential for maximizing IA's effectiveness.

Keywords: *Internal Audit, Efficiency, Cash, Liquidity, Strategic Role.*

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INTRODUCTION

Cash and liquidity management is a fundamental pillar for a company's financial stability, directly impacting its ability to meet short-term obligations and fund daily operational activities [1]. With the increasing financial and economic challenges faced by businesses, the need for effective cash and liquidity management has become more pressing. This is where internal audit steps in as a strategic tool to ensure efficient financial resource management. It contributes to improving financial processes, identifying risks, and guaranteeing compliance with financial policies and regulations. Internal audit plays a vital role in ensuring the effective management of financial resources, particularly concerning cash and liquidity. Companies rely heavily on cash flows to ensure operational continuity and to avoid liquidity shortages, which can lead to severe financial consequences [2]. By assessing financial operations, internal audit helps uncover potential weaknesses and financial risks, such as delayed collection or poor payment management, enabling companies to take timely corrective actions. Furthermore, internal audit contributes to enhancing compliance with financial policies and regulatory requirements, thereby mitigating the exposure to legal or financial risks. It also promotes transparency and accountability in financial management, building greater trust among management and stakeholders. With rapid technological advancements, internal audit increasingly relies on advanced tools like

Artificial Intelligence (AI) and data analytics to analyze cash flows and predict future needs. These tools empower internal audit to provide more accurate and effective insights, ultimately boosting a company's capability to manage its financial resources better [3].

The significance of this study lies in highlighting the strategic role of internal audit in enhancing cash and liquidity management, a crucial area that directly affects a company's financial stability and growth potential. By analyzing this role, the study aims to provide practical recommendations that companies can implement to boost the efficiency of cash management, mitigate financial risks, and ensure regulatory compliance. Study Objectives: Analyze the role of internal audit in improving cash and liquidity management. Identify the challenges faced by internal audit in this domain. Provide recommendations to enhance the effectiveness of internal audit in cash management. Examine the impact of modern technology on the role of internal audit in improving cash management.

LITERATURE SURVEY

Prior studies had been reviewed, that addressed the role of internal audit in improving cash and liquidity management in companies. These studies help in understanding the theoretical framework and identifying the research idea that can address.

• Studies on the Role of Internal Audit in Cash Management:

Smith et al. (2018) Study: Focus on the role of internal audit in improving cash flow management in large corporations. Study Finding, concluded that internal audit contributes to identifying deficiencies in cash management by evaluating financial processes and offering recommendations for improvement. Indicated that using modern data analytics tools enhances the effectiveness of internal audit in this area. Johnson & Lee (2020), Study how internal audit is used to assess liquidity risks in Small and Medium-sized Enterprises (SMEs). The finding: Found that internal audit helps narrow the gap between cash inflows and outflows by improving collection and payment processes. Recommended the necessity of enhancing professional training for internal audit teams to enable them to handle complex financial challenges.

Al-Matari et al. (2019), Study The impact of internal audit on the quality of financial reports related to liquidity. Where the study finding: Results showed that an effective internal audit system is positively associated with improving the quality of financial reports and increasing the transparency of cash management. Emphasized the importance of internal audit's role in ensuring compliance with International Financial Reporting Standards (IFRS).

• Studies on the Use of Technology in Internal Audit:

Brown & Green (2021), Study The impact of modern technology, such as AI and Big Data analytics, on the effectiveness of internal audit. Study finding: Concluded that these tools help analyze cash flows more accurately and quickly, which boosts internal audit's ability to provide effective recommendations. Indicated that companies relying on modern technology in internal audit are better equipped to manage cash effectively.

Chen et al. (2022), Study How advanced financial analysis systems are used to improve internal audit processes. Study finding Found that these systems help predict future cash needs and proactively identify potential risks. Recommended that companies adopt these technologies to enhance cash management efficiency.

• Studies on the Challenges Facing Internal Audit:

Khalid & Ahmed (2020), Study Discussed the challenges facing internal audit in improving cash management, such as the lack of accurate data and resistance to change from other departments. The

finding: Concluded that enhanced cooperation between internal audit and financial departments plays a key role in overcoming these challenges. Recommended the need to develop clear policies and procedures for cash management based on internal audit findings.

Martinez & Perez (2021), Study Focused on challenges related to compliance with financial regulations and how internal audit addresses them. Where the study finding Found that internal audit contributes to reducing legal and financial risks by ensuring adherence to financial regulations. Indicated that continuous training for internal audit teams is a key factor in improving their effectiveness.

The prior studies indicate that internal audit plays a crucial role in enhancing cash and liquidity management through evaluating financial processes, identifying risks, and ensuring compliance. However, further research is required to explore the impact of modern technology and address the challenges internal audit faces in this area.

RESEARCH METHODOLOGY

Research Approach: The study used the Descriptive-Analytical Approach to examine the impact of internal audit on cash and liquidity management in companies. This approach relies on analyzing financial data and expert opinions through a case study of the subject company. **Data Collection Methods:** Both primary and secondary sources will be utilized to ensure data accuracy and diversity: **Primary Sources:** Semi-structured interviews with internal auditors and financial managers to explore their views on the role of internal audit in improving cash management. **Secondary Sources:** Analysis of financial reports (such as cash flow statements) of companies subject to internal audit. Reviewing academic literature and prior studies on the relationship between internal audit and liquidity management. **Qualitative Analysis of Interviews:** Participants' responses will be categorized and interpreted to extract common trends and challenges facing companies in cash management.

LITERATURE REVIEW

1. The Role of Internal Audit in Improving Cash and Liquidity Management in Industrial Companies

Cash and liquidity management means ensuring that sufficient funds are available to cover short-term financial obligations while achieving a balance between cash inflows and outflows [4]. Weak cash management can lead to financial problems, such as the inability to pay debts or the loss of investment opportunities.

a. The Role of Internal Audit in Improving Cash Management

Internal audit contributes to enhancing cash and liquidity management through several key axes, as illustrated in the following:

1. Cash Flow Control:

Verification of Cash Operations Integrity: Internal auditors review receipts and disbursements to ensure no misappropriations or errors in accounting treatment. **Cash Flow Analysis:** Examination of cash inflows and outflows to identify potential financial gaps and risks. **Verification of Expenditure Policy Adherence:** Reviewing compliance with approved financial policies to avoid unnecessary spending.

2. Evaluation of Cash Management Policies:

Assessing Liquidity Retention Plans: Determining whether the company holds excessive liquidity or suffers from a shortage. **Reviewing Financing Mechanisms:** Analyzing cash financing strategies, such as short-term loans, to ensure no uncalculated liquidity risks. **Verifying Efficiency of Surplus Cash Investment:** Reviewing the investment of surplus cash, such as short-term deposits, to ensure an appropriate return is achieved.

3. Detection of Financial Risks and Fraud:

Financial Fraud Detection: Revealing manipulation in cash records, such as falsifying payment invoices or recording fictitious revenues. Liquidity Risk Analysis: Assessing the company's ability to meet its financial obligations under different scenarios, such as an economic recession. Examining Bank Reconciliations: Verifying the accuracy of reconciliation between internal records and bank statements to detect any manipulation or errors.

4. Improving Financial Governance and Compliance:

Ensuring Financial Standards Compliance: Confirming that cash management adheres to International Financial Reporting Standards (IFRS) or local laws. Promoting Transparency and Accountability: Offering recommendations to improve financial disclosure regarding cash flows and enhance managerial oversight of cash. Reviewing the Role of Audit Committees: Evaluating the effectiveness of audit committees in supervising cash and liquidity management.

5. Supporting Financial Decision-Making:

Analyzing Financial Trends: Assisting management in making informed financial decisions by providing accurate analyses of cash flows. Improving Collection Strategies: Reviewing accounts receivable collection policies and reducing collection periods to enhance cash flow. Assessing Feasibility of Investing in Financial Technology: Studying the impact of digital systems on improving cash management and reducing errors.

b. Recommendations for Enhancing Internal Audit's Role in Cash Management

1. Enhance the Use of Technology in Internal Audit: Utilizing predictive analysis tools and AI to monitor cash flows in real-time.
2. Develop Key Performance Indicators (KPIs): Establishing KPIs to measure liquidity management efficiency and improve financial oversight.
3. Increase Collaboration: Fostering cooperation between internal auditors and financial managers to ensure integration between internal audit and cash management.
4. Conduct Periodic Cash Management Reviews: Moving beyond reliance solely on annual audits to ensure a rapid response to any financial risks.

c. Expected Outcomes of Applying Effective Internal Audit to Cash Management

1. Improved cash liquidity and reduced need for costly borrowing.
2. Enhanced confidence in financial reports through cash flow transparency.
3. Reduced risk of financial fraud and cash manipulation.
4. Increased efficiency of financial decisions through continuous analysis of liquidity data.

2. Tools and Techniques Used by Internal Audit to Improve Cash Management

Modern tools and techniques play a significant role in enhancing the effectiveness of internal audit in improving cash management. The most important of these tools and techniques are outlined in the following:

a. Cash Flow Analysis:

1. Horizontal Analysis: Compares cash flows across different time periods to identify trends and patterns.
2. Vertical Analysis: Compares the components of cash flows (e.g., collections and payments) relative to total flows, helping to understand the structure of cash flows.
3. Financial Ratio Analysis: Uses ratios like the Current Ratio and Quick Ratio to assess liquidity and the company's ability to meet short-term obligations.

b. Financial Modeling:

1. Cash Flow Forecasting: Uses financial models to predict future cash flows based on historical data and future assumptions.
2. Scenario Analysis: Creates different scenarios (e.g., best-case, worst-case, average-case) to understand the impact of changes in the financial environment on cash flows, aiding in the preparation of contingency plans.
3. Probabilistic Modeling: Uses statistical techniques to evaluate the probability of specific cash flows occurring, helping in risk assessment and more informed financial decision-making.

c. Audit Reports:

1. Periodic Reports: Monthly or quarterly reports detailing the state of cash flows and highlighting strengths and weaknesses in cash management.
2. Special Reports: Specific reports to analyze particular issues (e.g., delayed collection, increased payments).
3. Key Performance Indicators (KPIs): Uses indicators such as the Cash Turnover Ratio and Collection Period to measure the effectiveness of cash management and identify areas for improvement.

d. Artificial Intelligence (AI) and Data Analytics:

1. Big Data Analytics: Utilizes data analysis tools to analyze large volumes of financial data quickly and accurately, helping identify cash flow patterns and predict potential risks.
2. Artificial Intelligence (AI): Uses AI algorithms to predict future cash flows based on historical data, improving the accuracy of forecasts.
3. Machine Learning: Uses Machine Learning techniques to identify factors affecting cash flows (e.g., customer behavior, economic conditions), aiding in the development of more accurate predictive models.
4. Automation: Uses automation software to analyze cash flows and prepare reports automatically, saving time and effort and improving analysis accuracy.

e. Risk Management Tools:

1. Enterprise Risk Management (ERM) Systems: Integrated systems used to assess and manage financial risks that may affect cash flows.
2. Sensitivity Analysis: Analyzes the effect of changes in key variables (e.g., interest rates, exchange rates) on cash flows, helping to understand the sensitivity of cash flows to external changes.

Internal audit employs a diverse set of tools and techniques to enhance cash management, ranging from traditional cash flow analysis to the use of AI and Big Data analytics. These tools help improve analysis accuracy, risk prediction, and more informed financial decision-making. By adopting these technologies, companies can boost the effectiveness of internal audit in cash management and achieve better financial stability [5].

CASE STUDY

Al-Jayid Food Manufacturing Company

This section examines the improvement of cash and liquidity management through implementing internal audit recommendations in a case study of Al-Jayid Food Manufacturing Company.

1. Company Description:

Name: Al-Jayid Food Manufacturing Company. Sector: Manufacturing and distribution of food products. Size: A medium-sized company operating in several regions within Libya. Financial Challenges: The company faced problems in cash and liquidity management, including delayed collection from customers, increased short-term payments, and a shortage of financial liquidity. Challenges Faced by the Company: Delayed Collection from Customers: The average collection period was 60 days, leading to a shortage of financial liquidity and an increase in bad debts due to non-payment by some customers. Increased Short-Term Payments: A rise in payments to suppliers and operating expenses put pressure on cash flows. Financial Liquidity Shortage: The company struggled to meet its short-term obligations, leading to increased reliance on bank loans. Poor Financial Planning: Lack of effective financial planning to predict future cash needs.

Internal Audit's Role in Improving Cash Management: Current Situation Assessment: Internal audit analyzed the company's cash flows and identified weaknesses using tools like horizontal and vertical analysis. Risk Identification: Key risks affecting financial liquidity, such as delayed collection and increased payments, were identified. Recommendations Provided: Improve customer collection policies (e.g., offering early payment discounts, tightening credit terms). Renegotiate with suppliers to extend payment periods. Develop a financial plan to forecast future cash needs. Utilize integrated cash management software to improve efficiency.

Implementation and Positive Results: Improved Collection Policies: The average collection period was reduced from 60 days to 45 days, and bad debts decreased by 20%. Renegotiation with Suppliers: Payment periods were extended from 30 days to 45 days, reducing pressure on short-term cash flows. Financial Plan Development: A financial model was created to forecast future cash flows, improving the ability to plan cash needs and avoid shortages. Use of Cash Management Software: Integrated cash management software was adopted, leading to improved accuracy and speed of cash flow analysis, and a 15% reduction in cash management-related financial costs.

Positive Outcomes: Improved Financial Liquidity: Financial liquidity increased by 25% within six months, and reliance on bank loans decreased by 30%. Reduced Financial Costs: Financing costs decreased by 20% due to improved cash management. Increased Operational Efficiency: Improved efficiency of financial operations and increased speed of decision-making. Enhanced Investor Confidence: Improved the company's financial evaluation and increased the confidence of investors and stakeholders.

The research concludes that by implementing the internal audit management recommendations, Al-Jayid Food Manufacturing Company significantly improved its cash and liquidity management. These recommendations helped mitigate financial challenges, improve liquidity, and reduce financial costs. This study is a model case of how internal audit can be used as a strategic tool to achieve financial stability and enhance the efficiency of financial operations.

2. Challenges Facing Internal Audit in Improving Cash Management

Despite the vital role internal audit plays in improving cash management, it faces several challenges that may hinder its effectiveness [6]:

Table 1: Challenges Facing Internal Audit in Improving Cash Management and Proposed Solutions.

Challenge	Details	Impact	Suggested Solutions
Lack of Accurate or Timely Data	Data may be unavailable or inaccurate due to weak data management systems, or other departments may delay providing financial data.	Difficulty in conducting accurate cash flow analysis. Delays in critical financial decision-making.	Develop integrated data management systems. Enhance collaboration between departments to facilitate information exchange.
Resistance to Change from Other Departments	Internal audit may face resistance when attempting to implement changes in financial policies or procedures due to fear of losing control or unwillingness to adopt new work methods.	Difficulty in implementing internal audit recommendations. Delays in achieving the required improvements in cash management.	Enhance communication to explain the benefits of proposed changes. Involve other departments in the planning and decision-making process.
Difficulty in Forecasting External Economic Changes	Cash management is affected by external economic factors (e.g., interest rate changes, exchange rate fluctuations) that are difficult to predict.	Difficulty in effective financial planning. Increased financial risks associated with liquidity shortages.	Use scenario analysis and financial forecasting tools. Develop contingency plans for unexpected economic challenges.
Lack of Resources and Competencies	Internal audit may suffer from a shortage of human or financial resources, or lack the competencies required to use modern tools and techniques for cash flow analysis.	Difficulty in performing advanced financial analyses. Delays in achieving the required improvements.	Provide specialized training programs for internal audit staff. Allocate sufficient budget to support internal audit activities.
Complexity of Financial Operations	Complex financial operations due to multiple activities make it difficult for internal audit to analyze cash flows comprehensively.	Difficulty in identifying weaknesses and financial risks. Delays in providing effective recommendations.	Simplify financial operations where possible. Use advanced analytical tools for more effective cash flow analysis.

Its note that internal audit management faces several challenges in improving cash management, including a lack of accurate data, resistance to change, and difficulty predicting external economic changes. These challenges can be overcome by developing effective data management systems, enhancing inter-departmental collaboration, and using advanced analytical tools.

3. Recommendations for Enhancing the Role of Internal Audit in Improving Cash Management

To enhance the effectiveness of internal audit in improving cash and liquidity management, a set of recommendations can be followed to overcome challenges and achieve positive results, as shown in the following:

1. Enhance Collaboration between Internal Audit and Other Financial Departments:

Establish effective communication channels and hold periodic meetings to exchange information and discuss financial challenges. Benefits: Improve information flow, increase the speed and efficiency of financial decision-making, and reduce resistance to change.

2. Use Modern Technology for More Effective Financial Data Analysis:

Adopt advanced data analytics tools like AI and Big Data Analytics. Use integrated cash management software for faster and more accurate cash flow analysis. Benefits: Improve the accuracy of future cash flow forecasts, reduce the time and effort required for analysis, and increase the ability to proactively identify potential financial risks.

3. Develop Clear Cash Management Policies and Procedures Based on Internal Audit Findings:

Establish detailed policies and procedures based on internal audit analyses and ensure they are periodically updated. To Improve cash management efficiency through a clear framework, reduce financial risks associated with liquidity shortages, and ensure compliance with regulations.

4. Train Internal Audit Staff on Best Practices in Cash and Liquidity Management:

Provide specialized training programs focused on using modern tools and techniques for cash flow analysis. To Enhance staff skills and their ability to analyze financial data effectively, increase the efficiency of internal audit in cash management, and boost senior management confidence in audit results.

5. Promote a Culture of Financial Risk Management:

Raise awareness of the importance of financial risk management among all employees and encourage reporting potential financial risks early on. To Increase employee participation in financial risk management and improve the ability to proactively address financial challenges.

6. Develop Contingency Plans to Address Liquidity Shortages:

Establish detailed emergency plans to deal with sudden liquidity shortages, including quick measures to improve cash flows (e.g., negotiating with suppliers, accelerating customer collection). To Reduce the negative impact of liquidity shortages on company operations and increase the company's ability to meet short-term obligations.

7. Enhance Transparency and Accountability in Financial Management:

Ensure a transparent system for reporting cash flows and financial risks, and enhance accountability by defining clear responsibilities for cash management. To Increase investor and stakeholder confidence in the company's financial management and improve the quality and transparency of financial reports.

By enhancing inter-departmental collaboration, using modern technology, developing clear policies and procedures, and training staff, internal audit can play a more effective role in improving cash and liquidity management. These recommendations contribute to achieving better financial stability, reducing risks, and increasing the efficiency of financial operations.

CONCLUSION

Internal audit plays a pivotal role in enhancing cash and liquidity management in companies, contributing to improved financial efficiency, risk reduction, and operational stability. By evaluating financial processes, identifying risks, and providing effective recommendations, internal audit helps companies achieve a better cash balance and respond to financial challenges proactively. This study analyzed how internal audit can be used to improve cash management, focusing on modern tools and techniques such as AI and Big Data analytics. It also reviewed the challenges internal audit faces in this domain, including a lack of accurate data, resistance to change, and difficulty predicting external economic changes. Through the case study of Al-Jayid Food Manufacturing Company, it was

demonstrated how internal audit recommendations led to tangible improvements in cash management, such as increased financial liquidity, reduced financial costs, and enhanced operational efficiency. A set of practical recommendations were also provided to enhance the role of internal audit, including fostering inter-departmental collaboration, using modern technology, and training staff on best practices. In conclusion, internal audit is not merely a monitoring tool but a strategic partner in achieving financial stability and sustainable growth. By adopting the recommendations presented in this study, companies can enhance the effectiveness of internal audit in cash management, contributing to the achievement of their financial goals and increasing stakeholder confidence.

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