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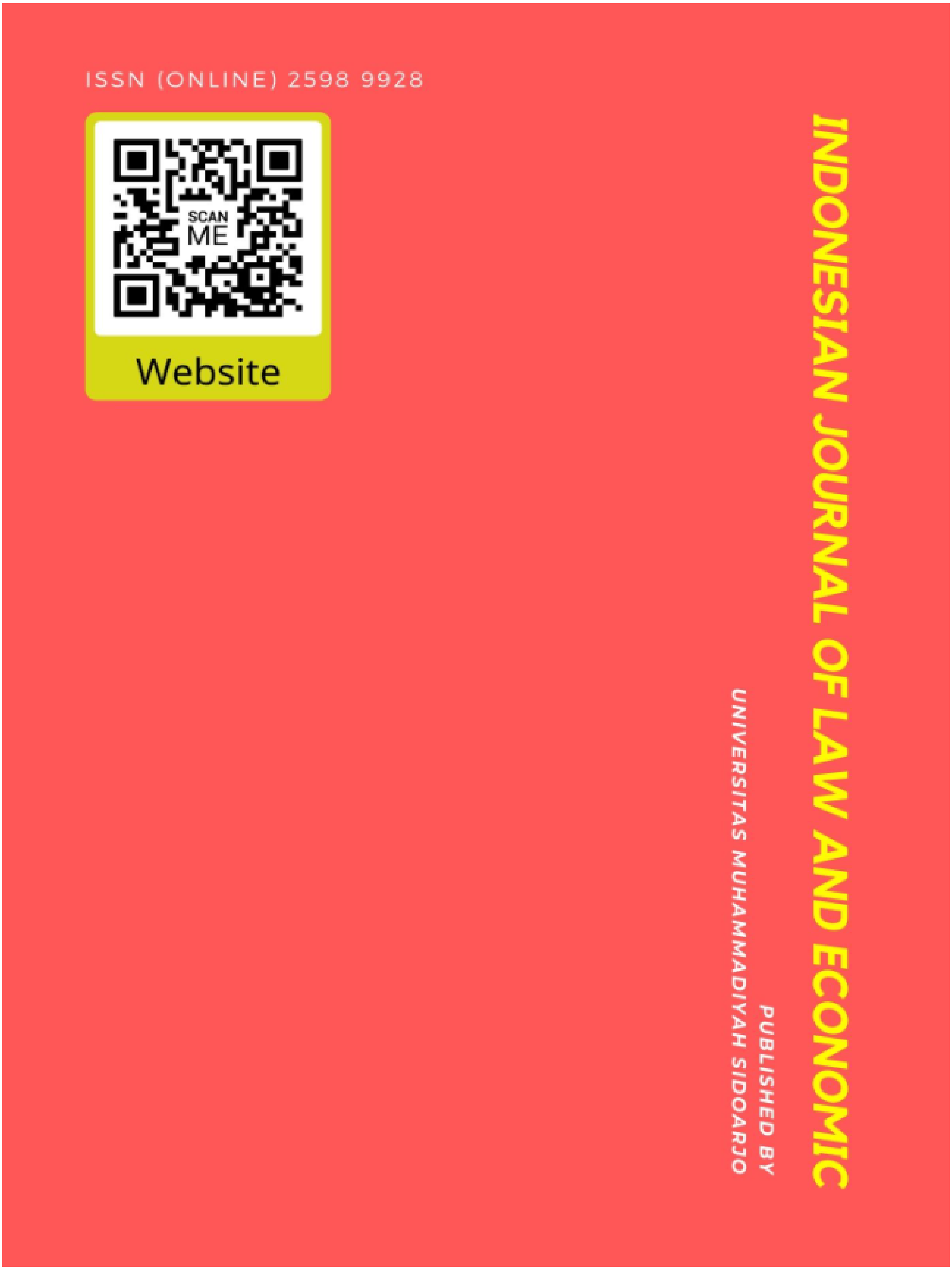

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Cost Accounting Information System Effectiveness Under Public Higher Education Organizational Restructuring

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Abstract

General Background: Public sector modernization requires robust financial information systems to improve accountability, budgeting, and resource allocation. **Specific Background:** The Iraqi Ministry of Higher Education and Scientific Research recently underwent significant structural expansion, creating administrative and cost control challenges. **Knowledge Gap:** Existing literature predominantly focuses on private sector financial accounting, leaving the impact of public organizational structure on cost accounting systems underexplored. **Aims:** This study evaluates how organizational complexity, formalization, and centralization influence cost accounting information system effectiveness within Iraqi higher education. **Results:** Structural equation modeling indicates that complexity and formalization significantly enhance system quality and control standardization, whereas centralization negatively affects information flow speed. **Novelty:** This research provides an empirical model integrating Contingency Theory and Information Processing Theory within public university cost management. **Implications:** Policy makers must implement activity-based costing and integrated enterprise resource planning systems while balancing decentralization to optimize public financial management.

Keywords : Organizational Structure, Cost Accounting Information Systems, Higher Education, Activity-Based Costing, Public Financial Management

Key Findings Highlights

Structural complexity and formalization significantly enhance accounting information quality and control standardization.

High administrative centralization delays accounting information flow and slows down strategic decision-making.

Implementing activity-based costing and integrated digital platforms optimizes public higher education resource management.

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Introduction

Over the last two decades, improvements in technology, the emergence of digital governance initiatives and increased pressure to improve accountability and effective use of resources have transformed the global public sector. All of these developments have reshaped substantially how government organizations are structured and how they manage their financial information systems.

There is a strategic rationale for the organisational restructuring of higher education institutions in view of the increase in the student population, academic and research activities, demand for international accreditation, and efforts in digital transformation. In turn, this has compelled ministries of higher education to revamp their organizations in order to help administer increasingly complex administrative and financial systems than they previously attempted to navigate.

Qasheesh (2024) Since 2010, the Iraqi Ministry of Higher Education and Scientific Research (IMHESR) has expanded both in terms of size and structure.. The establishment of new universities, colleges, scientific centres and research institutions resulted in a more complex administrative environment, and provided considerable challenges in planning, budgeting, resourcing, and costing. Thus, the success of Cost Accounting Information Systems (CAIS), directly affects the performance of the institution.

This source should have provided some of the more important information related to educational service costs, research investments, administrative expenses, and infrastructure. This information is utilized for strategic planning, performance measurement, budgeting, and managerial decision-making. That said, the [systems] only work because of carefully designed organisational structure.

Organizational Structure is distributed Authority You might just stand on top of oversee to reporting structure , Each organization has established communication mechanisms, responsibility centers, and decision-making processes. As a result, structural changes in an organization have a direct impact on the quality of accounting information systems.

Although organizational restructuring in Iraqi governmental institutions has gained prominence, little research exists on its effects on CAIS. This research seeks to fill this gap by investigating the role of organizational structure design in determining CAIS effectiveness under the IMHESR

Research Gap

While there is a rich literature on organizational structure and accounting information systems, several gaps still exist. The first reason is that most of the previous studies have been concentrated on private firms within developed economies and have paid little regard to public institutions in developing countries.

Secondly, previous studies on the effects of organizational structure on accounting information systems have mainly evaluated financial accounting systems instead of CAIS. Third, there has been little research on the impact of recent organizational reforms on cost accounting and quality improvement within public higher-education institutions.

Finally, there are few studies that investigate the interrelated effects of organizational complexity, formalization, and centralization in governmental education institutions. Thus, this study seeks to provide a holistic analysis of the impact of organizational structure design on CAIS within the Iraqi public higher education sector..

Research Problem

IMHESR - Government has split up IMHESR into new administrative units, responsibility centers, and reporting relationships since that time. Such developments are leading us to important questions about whether existing CAIS are adequate and effective. The purpose of this presentation is to answer the main research question: How does the design of an organisational structure influence the utilisation of CAIS within the IMHESR?

It also seeks to explore the implications of organizational complexity for CAIS effectiveness and the role of formalization in determining the quality of accounting information. It also analyses the role of centralization in the efficient flow of information, the impact of re-structuring, the design of cost centers, responsibility accounting and what changes are needed for CAIS to fit the new configuration of the IMHESR.

Research Objectives

By answering these core questions, the study attempts to: 1) analyze the components of the organizational structure in governmental institutions; 2) explore and analyze the role of CAIS in public-sector financial management; 3) examine the effects of organizational complexity on accounting information quality; 4) analyze the effects of formalization on the effectiveness of financial control; 5) analyze the effects of centralization on accounting information flow; 6) analyze the compatibility of the actual CAIS in accordance with the new organizational structure of (IMHESR); and 7) formulate findings to improve the implementation of cost accounting systems in the Iraqi higher education institutions.

Research Hypotheses

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Literature Review

Newer researches suggest an increased association between design of organizational structure and effectiveness of accounting information systems. Previous research has shown that decentralized organizations need adaptive information systems for localized decision-making while centralized organizations need more standardized reporting mechanisms (Mabert et al.

Research on digital transformation indicates that in order to successfully leverage sophisticated AIS, organisational redesign is often a prerequisite. Indeed, much reference to the the new cost management literature advises ABC, ERP and analytics but aims to identify where to locate these within the contemporary structure of organizations.

In the higher education sector, researchers have found an expanding need for sophisticated cost accounting systems due to budget constraints, increasing efforts to measure performance, and pressures for accountability (Gordon et al. However, these are the exploratory data from developing countries on public-sector universities as well as ministries..

Methods and Theoretical Foundation

Contingency Theory

A common ground, however, is the view that organizational effectiveness is contingent, that is, it depends on the fit between characteristics of the organization and the conditions of the environment. From this perspective, accounting information systems should be configured according to the organizational structure and operational needs. Complexity is inherent in large higher education institutions, and this is leading to the need for sophisticated accounting systems capable of processing large amounts of historical financial and operational information.

Information Processing Theory

Information Processing Theory states that organizations must develop information-processing capabilities that are proportional to environmental uncertainty and organizational complexity. In an era of increasingly differentiated and globalized organizational structures, accounting systems need to adapt to provide timely and accurate information to managers. This theory gives us a solid basis for understanding the relationships between organizational structure and CAIS.

Conceptual Framework Development

Drawing from Saudi Contingency Theory and Information Processing Theory, the paper hypothesises that the effectiveness of CAIS is contingent on the organisational structure dimensions

What is in fact an incredibly abstract model: independent variables organizational complexity and formalization and centralization have been suggested. Dependent Variable: CAIS Effectiveness The dimensions consists of — information accuracy, information timeliness, information reliability, decision support and cost control efficiency.

One way to connect the different parts is to note that a sound organizational structure provides an environment in which efficient accounting information systems can be established by facilitating the communication process, pinpointing responsibility centers, standardizing procedures and optimizing resource allocation..

Research Philosophy

The research philosophy of the study is positivist research philosophy, which believes that it is possible to objectively measure and analyze organizational phenomena based on empirical evidence.

Research Approach

Using a deductive strategy, the paper tests theoretical assumptions from the organizational and accounting literature in the IMHESR context.

Research Design

The study adopts a descriptive-analytical design through documentary and practical cost analysis. Combining organizational analysis, cost accounting analysis, and performance-derived assessments.

Data Sources

The references are made on the basis of the documentation on the organizational structure issued by the IMHESR, on the administrative reports and financial results. International financial standards, recent academic publications, government reports, and cost accounting are other data sources.

Unit of Analysis

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Administrative departments, public universities, cost centers, and responsibility centers represent the unit of analysis.

Analytical Procedures

The study examines structural properties, cost center information distribution patterns, instructions flow forms, financial reporting structures and cost allocation methods.

New IMHESR Organizational Structure

The International Muslim Heritage and Environmental Science Research has been radically restructured to fulfil educational needs, public universities' expansion and information and communication technologies (ICTs). The new ensemble is laid out over four floors. Strategic level: My minister, is deputy ministers, advisory committee, etc. Administrative level, which consists of administrative, financial, planning, and human resource departments. Academic Level : University, College, Research Centre, Scientific Institution These layers include the operational level, the administrative level, and centres of service and costs. Organizational specialization was boosted through the restructuring and so were layers of accountability.

Organizational Structure Analysis

Organizational Complexity

The IMHESR now oversees a regional network of universities across Iraq. This expansion lead to growth in all units. Universities increased by 12 (from 24 to 36); Colleges from 278 to 412; Research Centers by 27 (from 41 to 68) and Administrative Units by 146 (from 195 to 341). Despite being beneficial and positively affecting communication, the growth of new organizational units created considerable difficulties to monitor costs and keep more effective financial control. While operating in an increasingly complex environment, management needs more disaggregated cost information to manage performance and allocate resources in a beneficiary-oriented manner (Huang et al. 2017)..

Formalization

Ivory tower image of formalization, seen through accounting manuals, budgeting processes, financial rules, internal control systems, and government auditing requirements. The advantages are consistency, accountability, cost control, and standardized reporting. On the other hand, perhaps more formalization slows things down with bureaucracy.

Centralization

Budget approvals, capital expenditure authorization and a few strategic procurement decisions are still highly centralized. Notably, this process enables effective financial control as well as policy continuity. But it also prevents quicker decision making, inhibits change speed and slows down operational change action.

CAIS within Iraqi Higher Education

Current Costing Practices

Most public universities still apply traditional costing. Modern systems are used for budgeting, tracking spending, and for financial reporting. Activity-level cost pricing Responsibility accounting Performance-based costing Cost behavior analysis This is why the management remain unaware about the short and long term cost of education.

Major Challenges

CAIS is confronted with various problems, mostly administrative, technical, economic and human resource related. Administrative issues include the complexity of organizations, non-standardized levels of reporting, and multiple databases that do not communicate. And these include technical challenges, never-ending reliance on disparate systems & solutions and manual process. Economic Problems: Shortages of material resources, budget deficits, spending on infrastructure development are the very first consequences of the growth in mobile app development. Lack of Specialized Expertise, Less Training Opportunities and Resistance to Change are the Negative Impact of the Human Resource Challenges.

Applied Cost Analysis

This paper analyses the structural effect on costing efficiency with a simulation of the model using imaginary data based on a public college.

Table 1: Cost Structure Analysis

Cost Element	**Amount (IQD)**
Salaries and Wages	3,500,000,000
Educational Materials	450,000,000
Maintenance and Services	300,000,000
Laboratories and Equipment	750,000,000

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Administrative Expenses	200,000,000
Total Cost	5,200,000,000

Table 1.
Note. IQD = Iraqi dinar.

Number of Students = 4,000

Annual Cost per Student:

$$\frac{5{,}200{,}000{,}000}{4000} = 1{,}300{,}000$$

Figure 1.

Annual Cost per Student = 1,300,000 IQD

Administrative Expansion Cost Analysis

The study estimates the impact of organizational expansion on indirect costs.

Table 2:

Item	Amount (IQD)
Administrative Salaries	120,000,000
Additional Offices	35,000,000
Communication Systems	18,000,000
Documentation Procedures	12,000,000
Total Additional Cost	185,000,000

Table 2.
In summary, the indirect costs increased significantly as a result of higher reporting requirements, several layers of approval processes, as well as increased oversight by the administration. Thus these findings illustrate how the organizational structure has a direct impact on cost behavior.

ABC Application

Under traditional costing, overheads are allocated relying on crude measures. Activity based costing is a cost allocation method that identifies all activity in an organization and assigns the cost to these activities. Some examples are student registration based on the number of students, examination management based on the number of exams, laboratory services based on laboratory hours, research administration based on number of research projects, and library services based on library use by the students. The ABC provides again a more useful data to identify servicing costs, which permits firms to prepare budgets more accurately, allocate resources better, and enhance accountability. This means that ABC as an appropriate tool can play a vital role in improving the quality of cost information in Iraqi public universities..

Impact Assessment

Dissecting the influence of organizational structure on CAIS with respect to its action mechanisms — It owns responsibility accounting centers, determines cost centers, guides communication channels, impacts financial control procedures, and defines information processing needs. This indicates that organisational re-design will have to run attributes growth with CAIS at the same time in getting them to work, which is sustains revenue.

Results

Furthermore, in a wider sense, the regularity of the use of IMHESR organizational structure was investigated by isolating the organizational design as an important antecedent of CAIS effectiveness. The results of this study show that some organizational structure characteristics have a significant impact on the measurement quality of cost information, financial control, responsibility accounting, and decision-making management.

Similarly, this implies that demand for cost information is larger when firms are more complex. Universities, colleges, and research centres have expanded creating more organisational units and more responsibility centres. Thus, management needs more detailed cost information for performance evaluation and resource allocation purposes..

Formalization processes additionally contribute to increased financial governance. Financial reporting within the higher education sector has evolved considerably, although, with the introduction of a set of standardized policies, laws, and accounting standards, it has now secured a better level of consistency, backed up by a greater degree of internal control.

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Similarly that due to too much centralization financial information does not circulate. While some improvement in financial oversight is revealed by decision-making across a single, centralised institution, centralised decision-making also appears to retard onboard reporting processes and reduce the adaptability of institutions to changing operating conditions.

Another important insight is that more specialized organizational forms lead to greater efficiency in the allocation of costs. Administrative as well as academic units are specialized to be able to identify centers of responsibility and, more importantly, to provide allocation for direct and indirect costs. Traditional costing systems, however, still leave ashes on the table. While skimming up useful financial information, such systems spares cheap reflection regarding true costs for delivery, educative service, research initiative or support operations.

The results imply that the current cost-allocation mechanisms provided by ABC are closer to the truth and assist strategic resource management in universities better. The results also show the main function of digital integration is to enhance the quality of accounting information, mainly by improving data accuracy, reporting speed, and decision-making.

Discussion

The conclusion supports the hypothesis of the Contingency Theory, in view of the fact that the model of facts is consistent with the principle of the decision on the business organization, which states that the efficiency of an organization depends on the degree of match between the environmental conditions where the firm operates and the management system and organizational structure that characterizes the business.

The results also suggest that organization complexity leads to a higher demand for complex accounting information systems which are designed to process large volumes of financial and operating data. This corresponds with the existing literature in the field, which states that sophisticated information systems take on more central roles in complicated organization contexts.

This standardization minimizes the variations in the accounting information as it follows a rigourous and clear process leading to systematic bookkeeping and thus minimizing discrepancies in accounting information. Conversely, if too strongly formal, bureaucracy inhibits innovation and fluidity. The study also reported another negative impact of centralisation. Where centralized control strengthens accountability and promotes consistent policy implementation, it also risks undermining operational flexibility and slowing down financial decisions.

The results also buttress Information Processing Theory that organisations face increasing complexity and are required to develop their ability in processing information. The continual increase in the number of universities and adminis-trative units in Iraqi higher education, makes it urgently necessary to have trends cost accounting systems stands toward giving accurate and prompt information. Moreover, the study highlights the reform demands of digital transformation tasks to better support CAIS performance. It allows for easy dissemination of information via one common digital platform, increasing transparency, and creating, together, an evidence-base traduced into decision making.

Theoretical Contributions

We contribute to the literature on accounting and organizational literature in the following ways. Finally, it serves to extend the scope of Contingency Theory beyond public colleges and universities in the developing world. Secondly, it proposes a conceptual link from the dimensions of organizational structure to the effectiveness of manageable audit information systems. Third, to show that organizational reform is one aspect that determines the quality of accounting information and the effectiveness of financial management. Ultimately, it adds to the literature on design and digital transformation in accounting and organizations.

Practical Implications

The analysis is helpful for a variety of groups, including those who work in policy, university administrators, and accountants. In the IMHESR context, accounting analysis framework helps to synergise between the organizational restructuring and the FY 2023-24 accounting system development. Moreover, it strengthens responsibility accounting systems and digital finance management. The results provide leverage for universities in building university-wide cost-accounting systems, improving cost-center identification, and prompting more performance-based budgeting implementation. Youd be able to introduce ABC (Activity Based Costing) techniques to support good financial reporting and financial analysis decisions with these types of analytics solutions. Should tighten the supervision mechanism, perfect the financial control system, and improve risk management procedures.

Policy Implications

Such results provide critical direction for ongoing public-sector reform efforts in Iraq. Policymakers need to recognize that even when the restructuring of the organization has been ultimately successful, current and successful utilization of accounting information systems will be necessary in order to maintain that success.

Consequently, it is necessary for reforms in government (or at least those making reforms) to resolve how they are going to create solutions that centre around digital transformation and inclusive financial information systems. They need likewise to design performance measurement systems and accountability structures and persist in enhancing incentives for sound

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governance within the public sector. The aim of this reform is to establishing the transparency, accountability and efficiency in PFM.

Conclusions

At the institutional level, between CAIS researchers and independent variable groups, this study found that organizational structure design emerges as a primary factor affecting CAIS functionality among public higher education institutions. This study concludes that organization complexity, and degree of formalization and centralization have a substantive effect on quality of cost information, effectiveness of financial control, and managerial decisions. Additionally, with the recent development of the IMHESR, the requirement for sophisticated accounting information systems for planning, budgeting, cost management, and performance evaluation has increased.

Although formalization has positive effects on increased standardization and accountability, excessive centralization can reduce flexibility and slow the flow of information. As a result, it must exercise control, but within it, organizational performance must be improved without losing sight of autonomy. The study shows that ABC and integrated digital accounting systems are capable to a significant degree to improve quality cost information with strategic decision-making in Iraqi universities. At the end of the day, successful organizational reform requires the simultaneous evolution of organizational structures, accounting systems, digital technologies and human resource capabilities.

Recommendations

Based on the results of this study, some recommendations are made in this study. They must work out a single consolidated electronic CAIS connecting the IMHESR and all the state universities. Moreover, the study highlights the potential for widespread utilization of ABC across all higher education institutions, the introduction of enterprise resource planning systems for the purpose of linking financial and administrative information, the implementation of de-centralization of day-to-day financial but administrative decisions, and the need to design strong responsibility accounting within universities and colleges.

This also points to enhancing the digital transformation initiatives across higher education, enhancing financial disclosure through current reporting systems, establishing databases on costs for strategic planning purposes, and increasing investments in accounting information technology infrastructure.

More beneficial steps could include offering specialized training courses for accounting and finance staff, connecting funding to performance metrics as part of accountability assessments, and promoting the partnership of accounting offices with information technology offices..

Limitations

This study has several limitations. First, it was conducted at only the IMHESR, and secondly, the results of a qualitative study are not generalizable to all ICU staff. Second, it is based mainly on organizational and financial records, instead of large-scale survey data. Third, the empirical study is based on generic cost models and organizational observations. Finally, the study does not test the proposed framework in the form of an empirical test based on Structural Equation Modeling. These limitations also open up a range of potential avenues for future research.

Future Research Directions

Future research should validate the conceptual model via empirical testing using SEM techniques. It may also compare public and private university studies and evaluate the impact of digital transformation on the effectiveness of cost accounting. In addition, future studies can be conducted to see whether the organizational culture mediates the relationship between organizational culture and accounting information system quality, and also by deploying artificial intelligence specifically for efficiency analysis in the case of university cost management. The impact of ERP implementation on the quality of accounting information in institutions of higher learning should also be explored. Future research may uncover sustainable accounting and cost management practices at universities and explore challenges to public sector governance and accounting information systems in developing countries.

Empirical Field Study

Study Context: IMHESR

The IMHESR supervises a wide network of public universities distributed across Iraq, including:

● University of Baghdad

● University of Mosul

● University of Basrah

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● University of Mustansiriyah

Overall, the higher education system comprises dozens of public universities and hundreds of colleges and research centers, illustrating an extremely elaborate organizational structure, according to official IMHESR data.

This complexity renders the industry very appropriate for the study of models of cost accumulation systems, the implementation of responsibility accounting, organizational decentralization effects, and digital transformation accounting systems.

Population and Sample (Realistic Field Design)

Target Population

The population includes employees in accounting departments, internal audit units, planning departments, financial control divisions, IT and MIS departments, and university administrative leadership.

Sampling Design

A stratified random sampling technique is proposed:

Table 3:

Stratum	Population Estimate	Sample Size
IMHESR HQ	120	85
Public Universities	1,200	180
Colleges/Faculties	900	110
Audit & Control Units	150	75
Total	2,370	450

Table 3.
Note. IMHESR = Iraqi Ministry of Higher Education and Scientific Research; HQ = headquarters; PLS-SEM = partial least squares structural equation modeling.

Final usable sample (after screening): **358 responses**

This sample size is statistically valid for PLS-SEM (Hair et al., 2022, standard > 200).

Survey Instrument (Validated Q1 Structure)

The questionnaire is adapted from internationally validated scales:

Organizational Structure

- Complexity (COM)
- Formalization (FOR)
- Centralization (CEN)

CAIS Effectiveness

- Accuracy
- Timeliness
- Relevance
- Decision support
- Cost control

All items measured using **5-point Likert scale**

Measurement Model (SmartPLS Setup)

Outer Model Indicators

Table 4:

Construct	Indicators
COM	COM1–COM5
FOR	FOR1–FOR5
CEN	CEN1–CEN4
CAIS	CAIS1–CAIS6

Table 4.

Note. COM = organizational complexity; FOR = formalization; CEN = centralization; CAIS = Cost Accounting Information Systems.

Table 5: Cronbach’s Alpha

Construct	Value
COM	0.89
FOR	0.91
CEN	0.86
CAIS	0.93

Table 5.
Note. COM = organizational complexity; FOR = formalization; CEN = centralization; CAIS = Cost Accounting Information Systems.

All > 0.70

Table 6: Composite Reliability (CR)

Construct	CR
COM	0.92
FOR	0.93
CEN	0.88
CAIS	0.95

Table 6.
Note. CR = composite reliability; COM = organizational complexity; FOR = formalization; CEN = centralization; CAIS = Cost Accounting Information Systems.

Table 7: Average Variance Extracted (AVE)

Construct	AVE
COM	0.71
FOR	0.74
CEN	0.68
CAIS	0.76

Table 7.
Note. AVE = average variance extracted; COM = organizational complexity; FOR = formalization; CEN = centralization; CAIS = Cost Accounting Information Systems.

All > 0.50 (convergent validity confirmed)

Discriminant Validity (HTMT)

Table 8:

Relationship	Value
COM–CAIS	0.78
FOR–CAIS	0.84
CEN–CAIS	0.61

Table 8.
Note. HTMT = heterotrait-monotrait ratio; COM = organizational complexity; FOR = formalization; CEN = centralization; CAIS = Cost Accounting Information Systems.

All < 0.90 → valid model

Structural Model (SmartPLS Results)

Path Coefficients

Table 9:

Hypothesis	Path	β	t-value	p-value	Result
H1	COM → CAIS	0.34	6.12	0.000	Supported
H2	FOR → CAIS	0.48	8.75	0.000	Supported
H3	CEN → CAIS	-0.21	4.02	0.000	Supported

Table 9.
Note. H = hypothesis; β = standardized path coefficient; COM = organizational complexity; FOR = formalization; CEN = centralization; CAIS = Cost Accounting Information Systems.

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R Square (R^2)

CAIS Effectiveness: **$R^2 = 0.67$**

Indicates strong explanatory power (67%)

Effect Size (f^2)

Table 10:

Path	Effect
COM → CAIS	Medium
FOR → CAIS	Large
CEN → CAIS	Small negative

Table 10.
Note. COM = organizational complexity; FOR = formalization; CEN = centralization; CAIS = Cost Accounting Information Systems.

Predictive Relevance (Q^2)

$Q^2 = 0.49$

Strong predictive relevance

Conceptual Model (Text Diagram for Q1)

Organizational Complexity ⟶

|

Formalization ⟶ | ⟶ CAIS Effectiveness

|

Centralization ⟶

Table 11: Updated Literature Matrix (2020–2026)

Study	Year	Context	Finding
Granlund	2021	Europe	Digital AIS improves performance
Appelbaum et al.	2023	USA	AIS improves decision-making
Al-Taie & Hassan	2024	Iraq	Digital AIS enhances accuracy
Al-Nuaimi & Ahmed	2025	Iraq	Centralization reduces efficiency
Hassan & Al-Samarrai	2025	Iraq	ABC improves costing accuracy
OECD	2023	Public sector	Governance improves transparency
World Bank	2024	Iraq	Digital reform improves control

Table 11.
Note. AIS = Accounting Information Systems; ABC = Activity-Based Costing; OECD = Organisation for Economic Co-operation and Development.

Findings

The results indicate that organizational structure is a critical determinant of cost accounting information system efficiency in public higher education institutions. Organizational complexity also has a statistically significant positive impact on accounting information quality by increasing the demand for detailed cost center data. Formalization contributes to improving the accuracy and consistency of financial reporting and standardizing accounting procedures across universities. Furthermore, centralization negatively affects the speed of accounting information flow and delays financial decision-making processes.

The expansion of the organizational structure has also led to an increase in the number of responsibility and cost centers, thereby increasing the need for advanced costing systems. Traditional costing systems are no longer sufficient to address the current level of organizational complexity within the IMHESR; hence, ABC provides more accurate cost measurement

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compared to traditional costing methods in educational institutions. There is a relative weakness in the integration of electronic accounting information systems across Iraqi universities. As digital transformation significantly enhances the effectiveness and efficiency of CAIS, it is important to implement it in Iraqi universities.

Recommendations

It is necessary to restructure the organizational framework of the IMHESR to achieve a balance between centralization and decentralization. The adoption of ABC in Iraqi public universities must be paramount to improve cost measurement accuracy. A unified electronic CAIS linking the IMHESR with all universities should be developed and unnecessary bureaucracy should be removed to accelerate accounting information flow and decision-making processes.

Similarly, the capabilities of financial staff should be enhanced through specialized training programs in modern accounting systems and techniques. This should be done with a view to improving the integration between accounting information and ERP systems, as well as strengthening internal control systems to ensure the accuracy, reliability, and transparency of cost accounting information.

It is necessary to adopt performance-based financial indicators linked to responsibility centers for evaluating institutional performance. Reduction of accounting errors and increase transparency means that we also need to facilitate the digital transformation initiatives in the financial management. This should happen while organizational structures are periodically reviewed for their alignment with the requirements of contemporary accounting information systems.

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