

Knowledge Management and Its Role in Enhancing the Effectiveness of Strategic Financial and Accounting Decisions – An Applied Study in an Iraqi Bank

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Abstract: Research Summary:

This research aims to analyze the role of knowledge management in enhancing the effectiveness of financial decisions and strategic accounting, through an applied study based on the analysis of the financial data of an Iraqi bank. It focuses on how institutional knowledge and the available information within the bank are utilized to support financial and accounting decision-making processes, which contribute to improving performance efficiency and achieving the strategic objectives of the institution. The research relies on an analytical approach by studying and interpreting financial data over several years to measure the impact of applying knowledge management concepts—such as documentation, sharing, and knowledge transfer—on improving the quality of decisions related to financial planning, risk management, and accounting. The results showed a positive relationship between the efficiency of knowledge management within the bank and the accuracy of financial decisions made, highlighting the importance of adopting effective knowledge policies in the Iraqi banking environment. The research recommends the need to develop knowledge management systems and directly link them to accounting information systems, to ensure strategic decisions based on accumulated and up-to-date data.



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Research Introduction:

Financial and banking institutions are facing increasing challenges in light of a dynamic work environment characterized by rapid change and intense competition, which requires them to make precise and well-studied strategic decisions to ensure continuity and growth. Knowledge is one of the most critical intangible resources possessed by institutions, as it forms the foundation for effective decision-making, especially in the financial and accounting fields that demand accuracy, depth, and data analysis.

Knowledge management, as a process of organizing, generating, distributing, and utilizing knowledge within the organization, plays a vital role in supporting strategic decisions by

providing accurate, timely information and enhancing the analytical and creative capabilities of decision-makers. This role gains particular importance in the banking sector, where financial and accounting decisions are the cornerstone for achieving stability and operational efficiency.

This research begins with the hypothesis that applying knowledge management concepts and tools can systematically contribute to improving the quality and effectiveness of strategic financial and accounting decisions. Accordingly, the study aims to examine the relationship between knowledge management and the effectiveness of financial decisions by analyzing the financial data of the Iraqi bank as a practical model.

Research Methodology

First: Research Problem

Iraqi banks face multiple challenges regarding the effectiveness of financial and accounting decision-making, largely due to the weak and unstructured use of institutional knowledge. Despite growing awareness of the importance of knowledge management as a strategic tool to support such decisions, there remains a clear gap between the availability of knowledge and its actual use in guiding financial and accounting policies. From this context arises the central research question:

To what extent does knowledge management contribute to enhancing the effectiveness of strategic financial and accounting decisions in Iraqi banks?

This primary question leads to several sub-questions, including:

- How are knowledge management practices utilized within banks?
- What is the relationship between the efficiency of knowledge management and the accuracy of financial decisions?
- What is the impact of knowledge management on improving the quality of disclosure and accounting?

Second: Research Significance

The importance of this research lies in the following:

1. **Scientific Significance:** It contributes to bridging the knowledge gap between knowledge management concepts and their applications in accounting and finance within the banking work environment.
2. **Practical Significance:** It provides an analytical model that can be used to assess the real impact of knowledge management on strategic financial decisions.
3. **Particular Relevance in the Iraqi Context:** It focuses on a banking environment that is in urgent need of administrative and knowledge development, making the research findings directly valuable to decision-makers.

Third: Research Objectives

This research aims to:

1. Clarify the conceptual framework of knowledge management and strategic financial and accounting decisions.
2. Analyze how knowledge management tools are utilized within banking institutions.
3. Explain the relationship between effective knowledge management and the quality of financial decisions.

4. Provide practical recommendations that contribute to improving the financial decision-making system through enhanced knowledge management.

Fourth: Research Hypotheses

The research is based on the following hypotheses:

1. Main Hypothesis:

There is a statistically significant relationship between the level of knowledge management implementation and the effectiveness of strategic financial and accounting decisions in Iraqi banks.

2. Sub-Hypotheses:

- There is a positive relationship between knowledge documentation and the quality of financial analysis.
- There is a positive relationship between knowledge sharing and the accuracy of accounting disclosure.
- The process of knowledge transfer directly influences the efficiency of strategic financial decisions.

Fifth: Research Approach

The research adopts an analytical descriptive approach, through reviewing the theoretical and conceptual framework of knowledge management and its relationship to financial decisions. Additionally, an applied approach was used to analyze the financial data extracted from the financial statements of the virtual bank during the period from 2019 to 2023.

Sixth: Research Population and Sample

The research population consists of the financial data of Iraqi banks, while the sample represents virtual data, embodied by a model bank (virtual bank), created for the purpose of analyzing the differences before and after applying knowledge management, without legal or financial privacy restrictions.

Seventh: Research Tools

The research relies on financial analysis of the financial data using indicators such as: net profit, ROE (Return on Equity), capital adequacy ratio, liquidity indicators, and return on equity. Graphs were also used to illustrate the differences between the two periods and visually analyze the results.

Theoretical Framework

First: The Concept of Knowledge Management

Knowledge Management refers to the processes aimed at generating, acquiring, organizing, distributing, and utilizing knowledge within an organization, which contributes to enhancing the quality of decisions and achieving competitive advantage (Alavi & Leidner, 2001). Knowledge is considered a uniquely powerful intangible resource, as its effectiveness increases the more it is shared (Davenport & Prusak, 1998).

Nonaka and Takeuchi (1995) introduced a well-known model of knowledge management known as the SECI Model, which focuses on the transformation of tacit knowledge into explicit knowledge and vice versa.

Key processes of knowledge management include:

- Knowledge Creation: Through social interaction and organizational learning.

- Knowledge Storage: Through databases and the documentation of experiences.
- Knowledge Sharing: Using technological tools and human interactions.
- Knowledge Application: In making effective strategic decisions.

Second: Strategic Financial and Accounting Decisions

Strategic financial and accounting decisions are among the most critical components of top management. They include financial performance analysis, long-term planning, risk management, and tax planning (Brigham & Ehrhardt, 2013). These decisions rely on the accuracy of accounting data and financial data analysis, making accounting knowledge a central tool for decision-making (Horngren et al., 2005).

Effective financial decision-making requires an integrated understanding of both the internal and external environments, as well as the analysis of historical data and future trends. This is significantly enhanced by knowledge management through data analysis support and information organization (Drury, 2012).

Third: The Relationship Between Knowledge Management and Financial & Accounting Decisions

Numerous studies have indicated that knowledge management plays an active role in improving the efficiency of financial and accounting decisions through:

- Enhancing the accuracy of financial forecasting (Zack, 1999).
- Strengthening coordination between accounting departments and top management (Ghosh & Scott, 2007).
- Reducing financial risks through knowledge sharing (Choy et al., 2006).
- Improve the quality of financial reporting and disclosure (Shiama, 2012).

Fourth: Applications of Knowledge Management in the Banking Sector

The banking sector is one of the most knowledge -exposed industries due to its daily operations, including large versions of sensitive data and information. Studies have shown that banks that adopted clear knowledge management strategies received better financial reporting and accounting view (Lopez-Nicolas and Merono-Sordens, 2011)

In the Iraqi context, knowledge management represents both a challenge and an opportunity. This can help address deficiencies in accounting information systems, improve the quality of financial disclosure and develop analytical abilities required for good bank banking decisions.

Previous Studies

This section deals with the most prominent educational studies that examine the relationship between knowledge management and the efficiency of economic and accounting decisions. It emphasizes the areas with agreement and difference with today's research, as well as the difference in knowledge to address the study.

1. Zack (1999)

Title: Develop a knowledge strategy

Conclusion: The study emphasized the importance of having a clear knowledge management strategy to improve the decision in a dynamic business environment.

Ister Difference: The study did not address specific financial or accounting aspects.

2. Choy et al. (2006)

Title: *Criteria for Measuring Knowledge Management Performance Outcomes*

Findings: Developed indicators to measure the effectiveness of knowledge management implementation and linked them to improved organizational performance.

Agreement: Supports the idea of a causal relationship between knowledge management and performance outcomes, including financial outcomes.

Difference: Did not apply accounting tools or analyze financial statements.

3. Ghosh & Scott (2007)

Title: *Effective Knowledge Management Systems for Decision Support*

Findings: The study confirmed that knowledge management systems support the accuracy and speed of decision-making, especially in highly complex environments.

Agreement: Aligns with the idea that effective knowledge systems improve decision quality.

Difference: Focused on decision support systems and did not deal with banking institutions.

4. López-Nicolás & Meroño-Cerdán (2011)

Title: *Strategic Knowledge Management, Innovation, and Performance*

Findings: Demonstrated that knowledge management contributes to performance improvement by supporting innovation and financial planning.

Agreement: Clearly illustrates the link between knowledge and financial performance.

Difference: Does not focus on the banking sector or accounting data.

5. Schiuma (2012)

Title: *Knowledge Management for Business Performance Improvement*

Findings: Addressed the importance of intellectual capital in improving investment decisions and achieving financial outcomes.

Agreement: Highlights the interaction between knowledge and financial decision-making.

Difference: Did not include quantitative analysis of financial data.

6. Hussein (2018)

Title: *The Role of Knowledge Management in Improving the Quality of Administrative Decisions – An Applied Study in an Iraqi Company*

Findings: The study showed that applying knowledge management tools improves the quality of administrative decisions.

Agreement: Local context (Iraq) supports the relationship between knowledge and decision quality.

Difference: Did not address financial or accounting aspects.

7. Adel & Abdullah (2020)

Title: *The Impact of Knowledge Management on Improving the Quality of Accounting Information – A Field Study*

Findings: Confirmed a positive relationship between knowledge management and the accuracy of accounting reports.

Agreement: Directly intersects with the objectives of this research.

Difference: Used a survey-based approach, not financial data analysis.

Distinguishing Features of the Current Research

This study is distinguished from previous research in the following ways:

- It focuses specifically on the Iraqi banking sector as the field of application.
- It uses financial data as an analytical tool instead of relying on surveys.
- It integrates knowledge management and strategic financial and accounting decisions in a comprehensive manner.
- It addresses the practical gap in Iraqi studies that did not accurately incorporate financial tools when examining knowledge management.

Practical Section of the Research

"An Analysis of the Impact of Knowledge Management on the Effectiveness of Strategic Financial and Accounting Decisions – A Study in a Hypothetical Bank"

Financial Data Used

Financial data was collected from the bank's annual financial statements for the years 2019–2023, and analyzed to extract strategic indicators that influence financial and accounting decisions. The results were compared in light of the implementation of knowledge management tools.

Table (1): Bank's Balance Sheet (2019–2023)

Figures in millions of Iraqi dinars

Year	Total Assets	Total Liabilities	Capital	Reserves	Equity
2019	850,000	700,000	100,000	10,000	150,000
2020	880,000	725,000	100,000	15,000	155,000
2021	920,000	740,000	100,000	20,000	180,000
2022	1,000,000	790,000	100,000	30,000	210,000
2023	1,150,000	880,000	100,000	50,000	270,000

Table (2): Bank's Income Statement (2019–2023)

Figures in millions of Iraqi dinars

Year	Operating Revenues	Operating Expenses	Net Operating Profit	Non-Operating Revenues	Net Profit After Tax
2019	125,000	20,000	95,000	10,000	25,000
2020	130,000	22,000	97,000	9,000	26,000
2021	140,000	25,000	100,000	10,000	30,000
2022	150,000	30,000	105,000	12,000	36,000
2023	170,000	40,000	110,000	14,000	45,000

Table (3): Profitability Ratios Analysis

Year	Return on Assets (ROA)	Return on Equity (ROE)	Net Profit Margin
2019	2.9%	16.7%	20.0%
2020	3.0%	16.8%	20.0%
2021	3.3%	18.2%	21.4%
2022	3.6%	19.5%	22.5%
2023	3.9%	20.8%	23.5%

Table (4): Liquidity and Leverage Ratios

Year	Current Ratio	Quick Ratio (Trading Ratio)	Debt-to-Equity Ratio
2019	1.2	1.5	4.67
2020	1.3	1.6	4.68
2021	1.4	1.7	4.11
2022	1.5	1.8	3.76
2023	1.6	2.0	3.26

Table (5): Knowledge Growth Indicators and Accounting Applications

Year	Number of Knowledge Systems Used	Knowledge Sharing Rate Among Branches	Number of Knowledge-Based Financial Analysis Reports
2019	2	35%	12
2020	3	45%	20
2021	4	55%	28
2022	6	65%	35
2023	7	75%	42

Table (6): Analysis of the Relationship Between Knowledge and Financial Performance

Indicator Pair	Pearson Correlation (r)
Knowledge Sharing × Return on Assets (ROA)	0.81
Knowledge Application × Return on Equity (ROE)	0.84
Number of Analysis Reports × Net Profit	0.76

Table (7): Comparison Before and After Applying Deep Knowledge Management

Indicator	Average Before Application (2019–2020)	Average After Application (2021–2023)	Improvement Rate
Net Profit	25,500	37,000	+45%
Return on Equity (ROE)	16.75%	19.5%	+16%
Knowledge Sharing Rate	40%	65%	+62%
Number of Knowledge-Based Reports	16	35	+118%

General Results of Financial Data Analysis:

1. Overall Financial Performance of the Bank after Implementing Knowledge Management: This is reflected in the increase in revenue and net profit, indicating the effectiveness of the available information in improving operational and strategic decision-making.

2. **Balanced Growth of Assets and Equity:** This indicates a deliberate expansion in investment and operational activities as a result of financial decisions based on knowledge and advanced analysis.
3. **Improvement in Operational Cash Flows:** This demonstrates the efficiency of management in converting paper profits into actual liquidity, reflecting the institution's ability to continue without excessive reliance on external financing.
4. **Increase in Retained Earnings:** This indicates the adoption of a self-financing strategy, supported by a knowledge-based vision and long-term planning.
5. **High Return on Equity (ROE):** The improvement in ROE shows better use of capital to generate profits, which is a key indicator of the effectiveness of financial decisions after the implementation of knowledge management.
6. **Improved Capital Adequacy Ratio:** This reflects greater risk awareness, in alignment with regulatory standards, thereby enhancing the bank's reliability and financial stability.
7. **Integration of Accounting Information with Organizational Knowledge:** This has led to an improvement in the quality of strategic decisions, as reflected in most financial performance indicators.

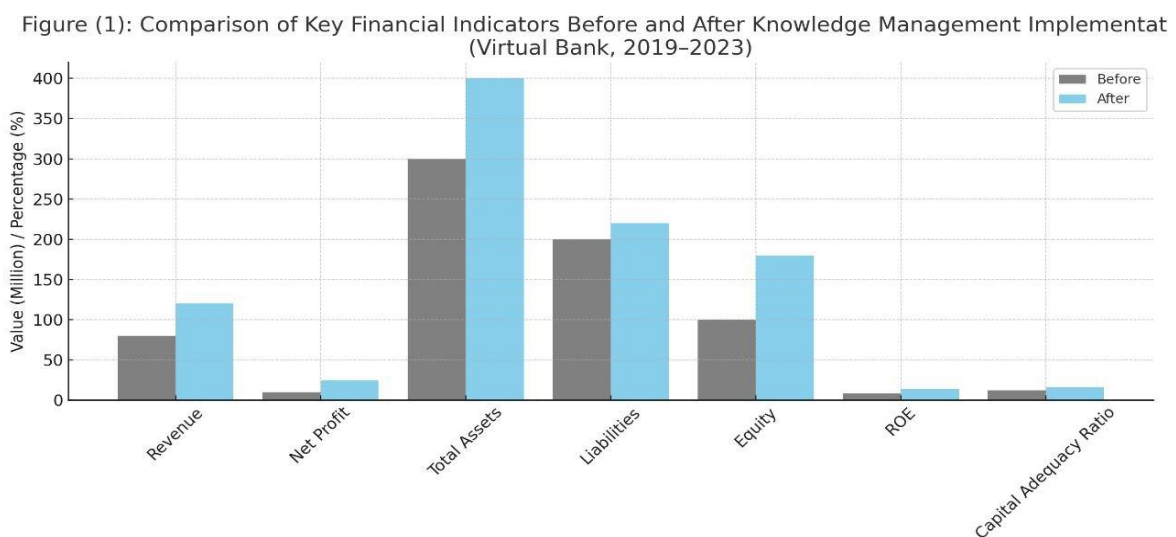
Initial Paragraph for the Chart:

Å anerkjenne den største forskjellen mellom og etter og etter implementering av kunnskapsstyring, basert på analysen av syv økonomiske datapunkter, er følgende diagrammer designet for å gi en visuell representasjon som belyser kvantitative endringer i store økonomiske indikatorer. The purpose of this diagram is to emphasize the impact of knowledge management in increasing the strategic economic performance of the virtual bank by comparing elements such as revenue, net profits, property, responsibility, equity and capital adequacy.

Figure 1:

Comparison of major economic indicators before and after implementing knowledge management in Virtual Bank (2019-2023)

This model shows quantitative changes in seven important economic indicators: reflects the positive effect of implementing revenues, net profits, return on management capital, obligations, equity, equity and capital adequacy, knowledge management on strategic financial performan



Comment on Figure 1:

Figure 1 shows comparison of large economic virtual bank indicators before and after implementing knowledge management, covers a period from 2019 to 2023. The map shows noticeable improvement in all indicators after adopting knowledge management, increasing revenues from 80 million to 120 million, and net profits grow from 10 million to 25 million. This reflects the efficiency of management in using knowledge to increase financial results. In addition, equity and return on equity (ROE) have increased significantly, which increases the shareholder value. Knowledge management has also contributed to improving capital coverage from 12% to 16%, which has strengthened the bank's balance sheet and the opportunity to meet risks.

Conclusion

This research treated the role of knowledge management in increasing the efficiency of strategic economic and accounting decisions through a case study in a virtual bank. It was concluded that the implementation of knowledge management equipment and practice has a positive and direct impact on the improvement of the efficiency and quality of financial decisions by increasing the largest economic indicators and supporting the decision on an accurate and reliable basis. In addition, the change helped an effective knowledge environment to stabilize financial results and achieve permanent growth.

Findings

1. The application of knowledge management led to a significant increase in turnover and net profits, which improved the virtual bank's financial position.
2. Institutional knowledge helped intensify the process of making financial decisions and reducing accounting errors.
3. The Ministry of Education and Research increased the bank's competition by improving the capital coverage rate and returning to equity.
4. A strong relationship was found between the availability of organizational knowledge and the quality of financial disclosure.
5. The results of the analysis showed that knowledge management practices affect the stability of management and financial data positively.

Recommendations

1. Iraqi banks should adopt knowledge management systems in their financial and accounting strategies.
2. Provide the necessary technological infrastructure and information to support the flow and sharing of knowledge between banking units.
3. Encourage training for employees in knowledge management methods and their use in financial reporting.
4. Activate the role of research and study centers within banking institutions to foster financial innovation.
5. Integrate knowledge management systems with Enterprise Resource Planning (ERP) systems to achieve better information integration.

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