

INFLUENCE OF KNOWLEDGE UTILIZATION ON STRATEGIC BUSINESS PERFORMANCE: AN EMPIRICAL STUDY OF COMMERCIAL STATE CORPORATIONS IN KENYA

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Abstract: This study examined the influence of knowledge utilization on strategic business performance among commercial state corporations in Kenya. The study was motivated by persistent concerns about inefficiency, weak profitability and repeated operational problems in state corporations despite the presence of considerable organizational knowledge and employee experience. A positivist philosophy and correlational quantitative design were used. The target population comprised 170 departmental respondents from all 34 commercial state corporations, and the calculated sample was 119. A total of 105 usable questionnaires were returned, representing an 88.24% response rate. Knowledge utilization was measured using ten five-point Likert-scale items and achieved a Cronbach's alpha of 0.92, while strategic business performance achieved an alpha of 0.84. Data were analyzed using descriptive statistics, cross-tabulation, Pearson correlation and multiple regression. Knowledge utilization recorded an aggregate mean of 3.872 and standard deviation of 0.9002. The strongest item was the use of new knowledge to develop business strategy ($M = 4.10$), whereas incentives for innovation received the lowest score ($M = 3.60$). Knowledge utilization was positively correlated with strategic business performance ($r = 0.464$). The direct-effects regression model was statistically significant, $F(4,100) = 10.193$, $p < 0.001$, and explained 29.0% of the variation in performance. Knowledge utilization had the strongest positive coefficient among the knowledge processes ($B = 0.378$, $\beta = 0.331$, $t = 3.358$, $p = 0.001$). Cross-tabulation also showed a significant association between utilization and performance, $\chi^2(6, N = 105) = 36.826$, $p < 0.001$. The study concludes that commercial state corporations improve strategic outcomes when accumulated knowledge is deliberately applied to decision-making, innovation, technology, problem-solving and business strategy.

Keywords: commercial state corporations; Kenya; knowledge management; knowledge utilization; strategic business performance.

1. INTRODUCTION

1.1 Background of the Study

Knowledge management has become an important management process because organizations increasingly depend on intangible resources, accumulated experience and professional expertise to improve productivity and remain competitive. Knowledge management entails systematically acquiring, storing, sharing and using organizational knowledge. These processes are important for organisations to turn experience, individual and collective, into information that can be used to help make decisions, innovate and continuously improve ^{[1], [2]}.

The action part of Knowledge Management is Knowledge Utilization. It refers to putting into practice knowledge that has been acquired to achieve something, develop products or services and manage unforeseen events and organizational strategy^[3]. If knowledge is collected and stored, there is little value for it in an organization. Its strategic importance is revealed when its work is put into practice by employees and managers in their operational processes, needs of their customers, technological choices, marketing actions, and in the long-term planning.

Commercial state corporations play a vital role in the Kenyan economy. Their roles include assisting in delivery of services, national development and generation of revenue as well as competing with the private sector bodies. In total, the Presidential Task Force on Parastatal Reforms identified 34 commercial state corporations which are spread in various sectors including agriculture, commerce, education, industrial development, housing and finance^[4]. They are under public duty and commercial pressures to be efficient, of quality, growing and financially sustainable.

Although the strategic performance of a number of state corporations has been in question, it has not been discussed in this paper. The thesis indicates low profitability, inefficiencies and reliance on public resources for the continued operation of the thesis. It also notes that knowledge that exists is not utilized in an optimal way, leading to reoccurring mistakes, poor decisions, and less innovation. The relevance of knowledge utilization in these conditions is emphasized since it is directly connected to measurable strategic outcomes from organizational learning.

In the present article the author is concerned with knowledge utilization and traces it from its conceptualization, measurement, statistical testing and interpretation. This focus is warranted through the empirical findings, where knowledge utilization is the most positive predictor of strategic business performance with respect to knowledge management.

1.2 Statement of the Problem

Kenya's commercial state corporations are expected to create value, provide critical services and contribute to national development. Yet there has been a lot of doubt about their performance as many still suffer net losses, are not financially viable or are poorly managed. The thesis notes that state corporations use a significant public resource, about KSh 400 billion per year, and some of them have weak profitability and lack of strategic development.

But not knowing is not a major concern. These organizations have knowledgeable staff members, record keeping systems, training programs, and interact with stakeholders. The challenge is that knowledge can be stored up and not applied to the work. A lack of knowledge utilization in innovation, technological investments, decision making and business strategy can lead to a gap between knowledge and results.

The existing literature that was studied in the thesis was mainly about private-sector firms and organizations not in the context of the Kenyan state-corporation. Therefore, there was not much empirical evidence to support the correlation of the utilization of knowledge with the strategic performance of commercial state corporations. The research in this study thus focused on the effect of knowledge utilization on strategic business performance to determine if organizations that make better use of knowledge had better strategic results.

1.3 Objective of the Study

To establish the influence of knowledge utilization on strategic business performance of commercial state corporations in Kenya.

1.4 Research Hypothesis

H04: There is no significant influence of knowledge utilization on strategic business performance of commercial state corporations in Kenya.

2. LITERATURE REVIEW

2.1 Theoretical Background

2.1.1 Knowledge Asset Theory

Nonaka^[5] proposed Knowledge Asset Theory as part of an organizational knowledge-creation model. It is based on the theory that organizational knowledge is generated by the interaction between tacit knowledge and explicit knowledge. It pinpoints four key processes which transform and evolve knowledge: socialization, externalization, combination and internalization. Knowledge assets are resources of an organization that facilitate this process and generate value.

The theory is applicable to knowledge utilization because only when knowledge is internalized and applied, can it lead to strategic outcomes. Knowledge assets used to support decision making, innovation, problem solving and organizational processes are utilization. The accumulated experience and information, and the technological knowledge were expected to be brought into action by inspectors in this study, so that they would be more successful in their performance. In this study, it was expected that the commercial state corporations would perform better if they would put the accumulated experience and information, and the technological knowledge, into practice.

2.1.2 Knowledge Economy Theory

Knowledge Economy Theory considers knowledge as a productive factor and a commodity that can be developed, shared, customized and applied across an organization's entire value chain. The theory highlights the role of technology in increasing the scope of explicit knowledge and facilitating faster coordination of work, adaptation of products and development of skills within organizations.

This view is useful for the study since knowledge utilization was examined in terms of technological knowledge, data-driven decision making, innovation and business strategy. These practices signal an organization's ability to convert knowledge to economic and operational value, instead of a passive resource.

2.2 Conceptual Review

2.2.1 Knowledge Utilization

Knowledge utilization is the application of the knowledge accumulated to solve organizational problems, to develop new product/service and to deal with unfamiliar situation [3]. The thesis operationalized the construct by means of innovation, data-informed decision making, technological knowledge and technological application. The indicators used were employee innovation, management's support of innovation, creation of new ideas, investments in technological knowledge, use of technology in products and services, use of modern technology in marketing and use of new knowledge in decision-making and business strategy.

However, there's more to effective utilization than just individual competence. Incentives, financial resources, technology and managerial assistance must be provided to the organization for knowledge to be put into practice. In such situations, past experience can minimize repeat errors, enhance service quality, and bolster market reactions and competitive edge.

2.2.2 Strategic Business Performance

Strategic business performance is all about how well an organization is doing in meeting its long-term goals in an effective and efficient manner. It can be assessed with financial measures like profit margins, and sales, or with non-financial measures like product or service quality, productivity, technological capability and employment growth/operational efficiency ^{[6], [7]}.

Thesis measures of competitiveness of products/services, productivity from knowledge and technology, sales growth, expansion of assets, growth of profit-margin and growth of employment and specialization of tasks were used to assess the performance. These are the indicators that revealed the commercial outcomes and the organizational ability.

2.3 Empirical Review

In the service sector a study identified knowledge assets, knowledge governance, coordination and relationship building as of the major processes for successful knowledge utilization. In knowledge intensive services, it is the staff who need to gain knowledge and make use of them to solve the customer's problems and to maintain the company's image ^[8].

The analyzed literature in the thesis also indicates that the knowledge acquisition, knowledge storage and application of knowledge in organizations will benefit from integration. Whether or not knowledge is applied in real work processes will impact the efficiency, decision making and innovation that can be achieved through knowledge management ^{[1], [2]}.

Studies on knowledge-based organizations also show that the internal knowledge resources relate to performance in the context of process improvement, new products, in service quality and competitive positioning. However, most of the evidence examined was from private companies and international settings and thus evidence was lacking in the Kenyan context of commercial state corporations.

2.4 Research Gap

Past studies have related knowledge management and organizational performance, and little evidence of effects on knowledge use was seen in the commercial state corporations in Kenya. These organizations are publicly owned, regulated and have bureaucratic processes which can affect the knowledge to action. This study thus set out to fill this gap both contextual and empirical by examining how knowledge utilization influences the strategic business performance based on the evidence from the commercial state corporations in Kenya.

2.5 Conceptual Framework

According to conceptual framework Knowledge Utilization is directly related to Strategic Business Performance. Innovation, use of data for decision making, use of technological knowledge, problem solving and business strategy development symbolize knowledge utilization. The strategic business performance is indicated by product/service quality, profit margin, cost reduction, sales growth and operational efficiency.

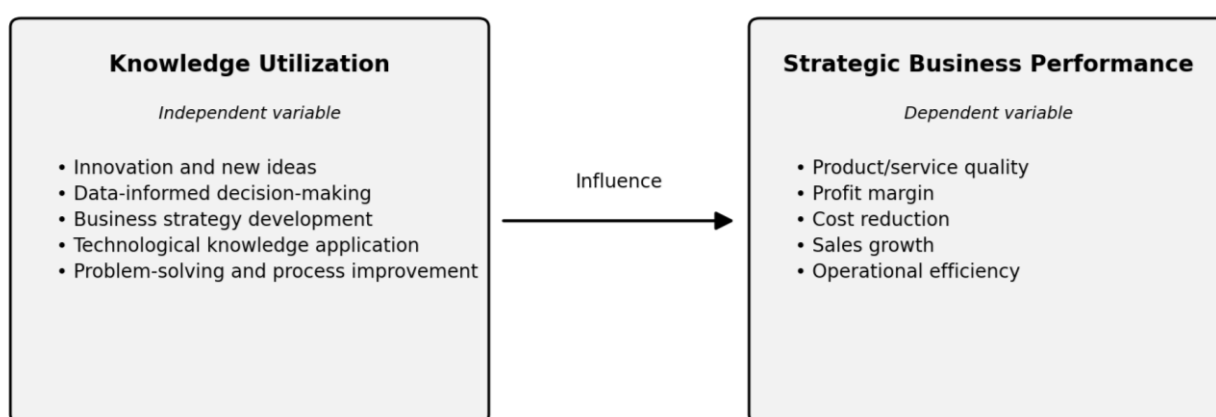


Figure 1: Conceptual framework for knowledge utilization and strategic business performance

3. RESEARCH METHODOLOGY

3.1 Research Philosophy and Design

The study was based from the philosophies of positivism and the type of research was correlational quantitative research. A suitable design was achieved since the study aimed at determining the magnitude and direction of the relationship between knowledge management processes and strategic business performance without any manipulation of the study variables.

3.2 Target Population, Sampling Frame and Sample Size

The respondents were 170 departmental personnel selected from all 34 commercial state corporations mentioned in the report of the Presidential Task Force. Each corporation had five functional areas that represented the following: finance, human resources, information and communication technology, sales and marketing, and operations. The unit of analysis was the commercial state corporation and the unit of observation the departmental employee. Fisher's formula was used to determine the minimum sample size, which was 119. In total 119 questionnaires were sent to all students, 105 were returned and 88.24% were responded to.

3.3 Data Collection and Measurement

A structured questionnaire incorporating items with five-point Likert scales was used to gather primary information. This questionnaire assessed knowledge acquisition, knowledge storage, knowledge sharing, knowledge utilization, leadership style and strategic business performance. Secondary was information obtained from published and audited records that was supposed to complement organizational performance measures. The questionnaires completed were screened, coded and analyzed using the Statistical Package for the Social Sciences.

Table 1: Operationalization of the study variables

Variable	Dimensions/indicators	Measurement
Knowledge utilization	Innovation; data-informed decision-making; business strategy; technological knowledge; process and product/service improvement	Ten items on a five-point Likert scale
Strategic business performance	Product/service competitiveness; productivity; sales; asset expansion; profit margin; employment growth; efficiency	Seven items on a five-point Likert scale

3.4 Reliability and Validity

Internal consistency was assessed using Cronbach's alpha. Knowledge utilization recorded an alpha coefficient of 0.92 and strategic business performance recorded 0.84. Both values exceeded the study's acceptable threshold and indicated strong internal consistency. Content validity was supported through expert judgment and repeated review by the research supervisors.

3.5 Data Analysis and Model Specification

Means and standard deviations were used for descriptive statistics. Pearson correlation analysis was performed for the analysis of the direction and strength of association between the variables. A multiple regression analysis was used to determine the unique association between each of the knowledge management processes and strategic business performance given the effect of the other knowledge processes. The 5% level of significance was used. The direct-effects model was specified as: $SBP = \alpha + \beta_1KA + \beta_2KST + \beta_3KSH + \beta_4KU + \mu$, where SBP is strategic business performance, KA is knowledge acquisition, KST is knowledge storage, KSH is knowledge sharing, KU is knowledge utilization, α is the constant, β_1 - β_4 are regression coefficients, and μ is the error term.

4. RESULTS

4.1 Response Rate

Of the 119 questionnaires administered, 105 were correctly completed and returned, yielding an 88.24% response rate. Fourteen questionnaires were not returned or were not usable.

Table 2: Response rate

Response category	Frequency	Percentage
Filled and returned questionnaires	105	88.24
Unfilled/not returned questionnaires	14	11.76
Total	119	100.00

4.2 Reliability Results

Table 3: Reliability of the focal constructs

Construct	Number of items	Cronbach's alpha
Knowledge utilization	10	0.92
Strategic business performance	7	0.84

4.3 Descriptive Results for Knowledge Utilization

Knowledge utilization recorded an aggregate mean of 3.872 and an aggregate standard deviation of 0.9002. The mean scores show that respondents generally agreed that knowledge was applied in organizational activities. The strongest practice was the use of new knowledge to develop business strategy, while the weakest practice was the provision of incentives for innovation.

Table 4: Descriptive statistics for knowledge utilization

Knowledge utilization item	Mean	Standard deviation
Employees are innovative and the corporation supports them.	3.93	0.763
The corporation gives incentives to encourage innovations.	3.60	1.025
Management supports innovation to match the market or create competitive advantage.	3.80	0.825
Innovation often leads to new products or services.	3.83	0.882
Employees develop new ideas and knowledge from what they have learned over time.	3.96	0.796
The organization allocates funds to foster technological knowledge.	3.67	0.987
Technological knowledge is used to improve services or products.	3.86	0.914
Marketing is conducted using modern technological knowledge.	3.98	0.971
New knowledge is used to inform decision-making.	3.99	0.893
New knowledge is used to develop business strategy.	4.10	0.946
Aggregate	3.872	0.9002

4.4 Knowledge Utilization and Strategic Business Performance Categories

The results revealed that the higher the level of knowledge use the better the performance was, as indicated in the cross-tabulation. Of the 14 respondents who reported low performance in the low utilization category, none reported high performance. Fifty-three of 73 respondents indicated moderate performance, 13 indicated high performance, in the moderate-utilization category. Nine out of 10 of those in the high utilization category reported moderate to high performance.

Table 5: Cross-tabulation of knowledge utilization and strategic business performance

Knowledge utilization	Very low performance	Low	Moderate	High	Total
Low utilization	1	14	7	0	22
Moderate utilization	0	7	53	13	73
High utilization	0	1	8	1	10
Total	1	22	68	14	105

The Pearson Chi-square test showed that there was a significant association between knowledge utilization and strategic business performance, $\chi^2(6, N = 105) = 36.826$, $p < 0.001$. There was also a linear-by-linear association which was significant, showing an ordered trend in the data between the two variables.

Table 6: Chi-square tests for knowledge utilization and performance

Statistic	Value	df	Significance
Pearson Chi-square	36.826	6	< 0.001
Likelihood ratio	34.304	6	< 0.001
Linear-by-linear association	19.195	1	< 0.001

4.5 Correlation Analysis

There was positive correlation between Knowledge utilization and strategic business performance ($r = 0.464$). This was the highest correlation of all four knowledge management processes with performance, suggesting that as organizations were more likely to be applying knowledge, they were more likely to report higher levels of the strategic outcomes.

Table 7: Correlations with strategic business performance

Variable	Correlation with strategic business performance
Knowledge acquisition	0.118
Knowledge storage	0.310
Knowledge sharing	0.403
Knowledge utilization	0.464
Leadership satisfaction	0.568

4.6 Regression Analysis

The direct-effects model produced $R = 0.538$ and $R^2 = 0.290$. The four knowledge management processes jointly explained 29.0% of the variation in strategic business performance. Data was analyzed using a model; this model was statistically significant $F(4,100) = 10.193$, $p < 0.001$, meaning that the set of knowledge processes predicted performance better than an intercept-only model.

Table 8: Direct-effects model summary

R	R square	Adjusted R square	Standard error
0.538	0.290	0.261	0.54356

Table 9: Analysis of variance for the direct-effects model

Source	Sum of squares	df	Mean square	F	Sig.
Regression	12.047	4	3.012	10.193	< 0.001
Residual	29.546	100	0.295		
Total	41.593	104			

Knowledge utilization had the largest positive coefficient in the model ($B = 0.378$, $\beta = 0.331$, $t = 3.358$, $p = 0.001$). All other knowledge processes being equal, the utilization of knowledge was found to raise strategic business performance by 0.378 units. Therefore, the null hypothesis was rejected.

Table 10: Focal coefficient from the direct-effects regression model

Focal predictor	B	Standard error	Beta	t	Sig.
Knowledge utilization	0.378	0.112	0.331	3.358	0.001

5. DISCUSSION

The results show that knowledge utilization is the strongest and most consistent knowledge-management predictor of strategic business performance. The overall average (3.872) indicates that in general, the sampled companies used knowledge in their activities, particularly in the field of business strategy and decision making, marketing, and the development of new ideas. This discovery confirms the thesis that knowledge is only strategically useful when it is applied and put to use instead of being learned or remembered.

It is found that there is a meaningful positive correlation between utilization and performance, as shown by the correlation coefficient of 0.464. The cross tabulation provides practical evidence as well. 1) Organizations with low utilization were grouped together in the low-performance category, while organizations with moderate and high level of utilization were grouped respectively in the moderate and high performance. The result obtained from the Chi-square test was strong and it is safe to say that this distribution was not likely to be a chance occurrence.

The regression coefficient is the simplest basis for the conclusion of the study. The positive and statistically significant effect of knowledge utilization remained when knowledge acquisition, storage and sharing were included in the same model. It had the highest size coefficient of the knowledge processes also. This is in line with the Knowledge Asset Theory as the knowledge built during experience and interaction with others adds value once it is internalized and applied ^[5].

The results found are in harmony with the report of Zaim, Muhammed and Tarim ^[8] in service sector that attributed successful utilization to problem solving, organizational skills, governance and coordination. They also concur with Hislop ^[2] and Dalkir and Liebowitz ^[1] who argue that application is a crucial step of transforming collective knowledge into efficiency and competitive advantage.

However, descriptive findings show some areas that may restrict the total utilization. The mean scores were the lowest for incentives for innovation and funding of technological knowledge. It means that workers can hold and use knowledge, and experiment, innovate and adopt technology is still not as well developed in the organization as using knowledge in their daily decisions and strategies. Commercial state corporations thus require to improve institutional factors enabling knowledge to create new products and enhanced services and ongoing operating benefits.

6. SUMMARY AND CONCLUSION

6.1 Summary

The study was on the role of knowledge utilization in strategic business performance of commercial state corporations in Kenya. To evaluate the knowledge utilization, indicators were used related to innovation; technological knowledge; and decision-making and business strategy. High reliability coefficient was attained on the construct with a broad implementation mean of the aggregate. It was the most strongly positively correlated with performance of all four knowledge processes. The results of the Chi-square test indicated that there was a high level of association between the utilization levels and performance categories, and the direct-effects regression revealed that utilization levels were significantly and positively associated with the performance categories.

6.2 Conclusion

The study found that knowledge utilization has a significant impact on strategic business performance of commercial state corporations in Kenya. The most significant impact of organizational knowledge is when decisions, strategy, innovation, technology and problem solving are implemented. The null hypothesis that the use of knowledge does not have a significant effect on the strategic business performance is rejected. State-owned companies involved in strengthening the application of knowledge are therefore more likely to become more competitive, productive, grow their sales, their efficiency and their growth.

7. RECOMMENDATIONS

- Formalize knowledge use in planning: Require strategic plans and major operational decisions to explicitly reference the data, past experience, or employee input that informed them, reviewed at quarterly planning meetings.
- Incentivize innovation directly: Allocate a modest annual innovation budget and tie recognition (awards, promotion points, funded pilots) to employee ideas that are actually implemented, with managers held accountable for how many ideas they escalate.
- Make utilization measurable: Add KPIs tracking documented cases where stored knowledge or technology solved a problem, cut costs, or improved quality, and report these alongside financial metrics in performance reviews and board briefs.

8. AREAS FOR FURTHER RESEARCH

The effects on strategic business performance were only 29.0% explained by the direct-effects model, so that there are still other organizational and environmental factors not included. Further research can be conducted on topics like governance structure, organizational culture, political interference, resource availability and technology readiness. Longitudinal research can also confirm the path taken by changes in knowledge utilization over time to changes in financial and non-financial performance. Comparative analysis of commercial state corporations and private companies would answer the question of whether the structures of public sector organizations would affect the utilization-performance relationship.

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