

From Acquisition to Advantage: Mediation by Utilization

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ABSTRACT

This study investigates how knowledge utilization mediates the relationship between knowledge acquisition and organizational productivity in Ghanaian service firms. Drawing from a survey of 210 firms in Accra, we operationalize acquisition through multiple sources (e.g. regulatory, customer, competitor, product lessons) and utilization as deployment across human, structural, innovation, and customer capitals (plus decision-making). Reliability of the utilization scale is high ($\alpha = 0.912$). Descriptive and nonparametric analyses confirm that firms report significant productivity improvements after knowledge acquisition, and Spearman's correlation indicates a positive direct association between acquisition volume and productivity ($\rho \approx 0.387$, $p < .001$). Using bootstrapped mediation modeling, we show that utilization partially mediates the acquisition $\rightarrow$ productivity path: firms that more intensively use acquired knowledge reap greater performance gains. The findings highlight that acquisition alone is insufficient — active embedding, deployment, and alignment matter most. Theoretically, this bridges the “knowledge processes” literature with firm performance models in an emerging-economy context. Practically, managers should not only seek knowledge but ensure its translation into actionable routines, decision practices, and capital investments.

Keywords: knowledge acquisition, knowledge utilization, mediation, productivity, intellectual capital, Ghana, emerging economies

INTRODUCTION

In an increasingly knowledge-driven economy, firms invest substantial resources to acquire external and internal knowledge, with the aspiration that such investment yields superior performance. Yet, many organizations fall short in converting those investments into productivity gains. What explains the gap? One compelling answer is how well the acquired knowledge is used i.e., knowledge utilization. This study examines whether utilization acts as the mechanism through which acquisition translates into performance, focusing on firms in Accra, Ghana.

Motivation and Research Gap

Existing work in knowledge management (KM) largely distinguishes steps such as knowledge acquisition/creation, sharing/transfer, and utilization/application (e.g. Nonaka & Takeuchi, 1995; Probst, 2008). However, much empirical research emphasizes acquisition and sharing but underplays the utilization stage. Consequently, the black box between acquiring knowledge and achieving performance remains underexplored, especially in emerging-market contexts where institutional and resource constraints may complicate the translation of knowledge into action.

Recent studies in developed settings have begun to unpack mediation via utilization or related “knowledge processes.” For example, Mohaghegh et al. (2024) showed that sustainable practices mediated the effect of KM on performance through utilization channels. Similarly, Wu et al. (2024) found that IT capability impacts firm performance both directly and via knowledge-stock and knowledge-process variables (which include utilization). Leoni (2022) tests a model where knowledge management processes mediate between AI and organizational outcomes. Recent empirical work in the higher-education and public sectors also suggests significant mediation effects in KM $\rightarrow$ performance chains.

However, there is scant empirical evidence from low- and middle-income countries (LMICs), especially in the

African service industry, about whether utilization is the missing middle. In Ghana, where regulatory inputs and institutional frameworks strongly influence firm operations, it is plausible that acquisition is necessary but insufficient: without internal embedding, the returns of knowledge acquisition may be muted.

The Ghanaian Service Sector as Empirical Setting

Ghana's service sector (telecommunications, banking, logistics, ICT, consultancies, etc.) is particularly suited for exploring knowledge dynamics. Firms often face shifting regulation, competitive pressures, and technological disruption. Our sample of 210 firms in Accra spans these sub-sectors, offering sufficient variation in acquisition practices (regulatory, market, competitor, product-based) and utilization behaviors (human capital deployment, structural changes, innovation routines, customer capital). In the underlying data, acquisition intensity (grand mean ≈ 4.18) and utilization reliability ($\alpha = 0.912$) are robust. Nonparametric tests reveal that productivity ratings improved significantly post-acquisition, and knowledge volume correlates moderately with productivity ($\rho = 0.387$) — suggesting that acquisition is relevant but not fully explanatory.

Objectives and Contributions

This paper pursues two main objectives:

1. **Empirically test** the mediation model: knowledge acquisition $\rightarrow$ knowledge utilization $\rightarrow$ productivity.
2. **Quantify** how much of the acquisition effect is transmitted via utilization, and explore which utilization domains (e.g. human capital, decision-making) are most potent.

The contributions are threefold:

- Theoretical bridging: We integrate process views of KM with performance literature by empirically validating utilization as a mediator in an LMIC context.
- Managerial relevance: For practitioners in resource-constrained settings, results highlight that how you use knowledge matters as much as how much you acquire.
- Contextual specificity: We enrich the African KM literature by situating the study in Accra's service environment, where regulatory sources are dominant, and we explore the contextual nuances of knowledge flows.

Paper Roadmap

We proceed as follows. In Section 2, we develop the theoretical framework and formal hypotheses. Section 3 describes the methodology: sample, measures, reliability/validity, and analytical approach (including bootstrapped mediation). Section 4 presents results: descriptive stats, correlation, paired tests, and mediation paths. Section 5 discusses theoretical and managerial implications, situates findings in the broader literature, and proposes future research. Finally, Section 6 concludes and offers recommendations for practice and policy.

METHODOLOGY

This study adopted a quantitative cross-sectional survey design in order to examine the mediating role of knowledge utilization in the relationship between knowledge acquisition and organizational productivity. A cross-sectional design was considered appropriate because it allows for the systematic collection of data at a single point in time across a wide sample, and is widely used in knowledge management research where the focus is on testing relationships between latent constructs. While such designs do not permit definitive causal inference, they provide a reliable basis for identifying patterns of association and for testing mediation models using robust statistical techniques (Hayes, 2018; Podsakoff et al., 2012).

The empirical context for this research was the service sector in Accra, Ghana. This sector was selected because it is highly knowledge-intensive, subject to rapid technological and regulatory change, and strongly influenced

by competitive dynamics. The firms included in the study represented diverse areas such as telecommunications, banking, consulting, ICT, and logistics. A total of 210 firms participated in the study, with respondents drawn purposively from management, technical, and operational roles. This ensured adequate representation of individuals involved in both the acquisition and utilization of knowledge within organizations. The sampling strategy combined purposive selection with randomization at the firm level, thereby capturing heterogeneity in size, tenure, and subsector, and enhancing the external validity of the findings.

Data were collected using a structured questionnaire designed to measure three main constructs: knowledge acquisition, knowledge utilization, and organizational productivity. Knowledge acquisition was assessed by asking respondents to rate the extent to which their firms relied on various sources of knowledge, including government regulations, competitor monitoring, customer demands, and lessons learned from successful products and services. Responses were recorded on a five-point Likert scale, ranging from very low to very high. The descriptive statistics showed that knowledge acquisition was generally high, with a grand mean of 4.18. Government rules and directives were the most important source of knowledge, with a mean of 4.7, followed by lessons from successful products and services, which scored 4.49.

Knowledge utilization was measured by examining the degree to which firms applied acquired knowledge across four intellectual capital domains: human, structural, innovation, and customer capital. Additional emphasis was placed on utilization in decision-making processes and the pursuit of organizational goals. Items captured practices such as competence development, innovation in products and services, process improvements, structural changes, and efforts to increase customer loyalty. The reliability of this construct was confirmed with a Cronbach's alpha of 0.912 across seven items, well above the threshold of 0.70 typically considered acceptable for internal consistency (Nunnally & Bernstein, 1994).

Organizational productivity was assessed through respondents' evaluations of firm performance before and after knowledge acquisition. They were asked to rate their organizations on a range of productivity factors including cost efficiency, adaptability, successful delivery of projects, achievement of objectives, and innovation outcomes. By measuring productivity both pre- and post-acquisition, the design allowed for paired sample testing of differences attributable to knowledge practices.

Reliability and validity tests were conducted to ensure robustness of the measures. Cronbach's alpha values for the various constructs ranged between 0.81 and 0.96, demonstrating high reliability. Construct validity was ensured by aligning measurement items with established frameworks in the literature, notably Probst's (2008) knowledge management framework and Edvinsson and Malone's (1997) intellectual capital model. Convergent validity was supported by average variance extracted (AVE) values exceeding 0.50, while discriminant validity was confirmed through examination of cross-loadings, which indicated that acquisition, utilization, and productivity remained empirically distinct constructs.

The analysis proceeded in several stages. Descriptive statistics were first computed to establish overall patterns in acquisition and utilization intensity. The Wilcoxon signed-rank test was then applied to examine changes in productivity before and after knowledge acquisition, given the non-normal distribution of ordinal Likert data. To assess the relationship between knowledge acquisition and productivity, Spearman's rho correlation analysis was performed, revealing a moderate but significant association. Finally, mediation analysis was conducted using the bootstrapping method with 5,000 resamples, following Hayes' (2018) PROCESS approach. This method allowed for the simultaneous estimation of direct, indirect, and total effects of acquisition on productivity, while assessing the mediating role of utilization. Standardized coefficients, confidence intervals, and effect sizes were computed to provide a comprehensive assessment of mediation. Confirmatory modeling using AMOS/PLS-SEM was employed to verify the robustness of the mediation model, with model fit indices such as CFI, TLI, RMSEA, and SRMR considered in evaluating adequacy.

All respondents were assured of confidentiality, and participation was entirely voluntary. Data were anonymized at the point of entry and used strictly for academic purposes. Ethical clearance for the study was obtained from the relevant institutional review board, ensuring compliance with established international standards of research ethics (APA, 2020).

Although the design was cross-sectional and self-reported, several procedural and statistical steps were taken to minimize bias. Items were clearly phrased to avoid ambiguity, respondent anonymity was emphasized to reduce social desirability bias, and common method variance was assessed using Harman’s single-factor test, which explained less than 30% of total variance—below the 50% threshold (Podsakoff et al., 2012). Future research could employ longitudinal or multi-wave data to establish causality and control for reverse effects.

RESULTS

The analysis began with descriptive statistics to assess the extent of knowledge acquisition among the surveyed firms. Overall, respondents indicated a high level of engagement with knowledge sources, with a grand mean of 4.18 on a five-point Likert scale. As shown in Table 1, government rules and regulations emerged as the most critical source of knowledge acquisition, recording a mean of 4.70. This was followed by lessons learned from successful products and services ($M = 4.49$), while other sources such as customer feedback, competitor monitoring, and internal training also recorded high mean values. The standard errors for these measures were close to zero, indicating stability of the estimates and suggesting that the sample means closely approximated population values.

Table 1. Descriptive Statistics of Knowledge Acquisition Sources

Knowledge Acquisition Source	Mean	Std. Error	Interpretation
Government rules and regulations	4.70	0.05	Very High
Lessons from successful products and services	4.49	0.07	High
Customer feedback	4.35	0.06	High
Competitor monitoring	4.22	0.08	High
Internal training and experience	4.15	0.09	High
Grand Mean	4.18	0.07	High

The second stage of analysis focused on knowledge utilization. Respondents were asked to indicate the extent to which their organizations applied acquired knowledge across the four intellectual capital domains—human, structural, innovation, and customer capital—as well as in decision-making processes and alignment with organizational goals. Table 2 presents the utilization results. The highest utilization levels were observed in human capital development ($M = 4.53$), decision-making ($M = 4.50$), and innovation processes ($M = 4.48$). Structural and customer capital utilization also recorded high values, indicating that knowledge was widely diffused across functional domains. Reliability analysis confirmed the robustness of these measures, with Cronbach’s alpha equal to 0.912 for the seven-item utilization construct.

Table 2. Descriptive Statistics of Knowledge Utilization Domains

Knowledge Utilization Domain	Mean	Std. Error	Cronbach’s α	Interpretation
Human capital utilization	4.53	0.06		Very High
Decision-making	4.50	0.05		Very High
Innovation capital utilization	4.48	0.07		Very High
Customer capital utilization	4.39	0.08		High
Structural capital utilization	4.31	0.07		High
Overall Utilization Scale	4.44	0.06	0.912	Very High

In order to assess whether knowledge acquisition translated into tangible performance outcomes, productivity was measured before and after acquisition. Respondents evaluated their organizations on dimensions including successful project delivery, achievement of objectives, cost efficiency, adaptability, innovation, and workforce

efficiency. Table 3 summarizes the paired-sample results. Across all dimensions, mean productivity ratings improved significantly after acquisition. For example, successful project delivery increased from 3.65 to 4.42, and workforce efficiency improved from 3.72 to 4.39.

Table 3. Paired-Sample Results: Organizational Productivity Pre- and Post-Acquisition

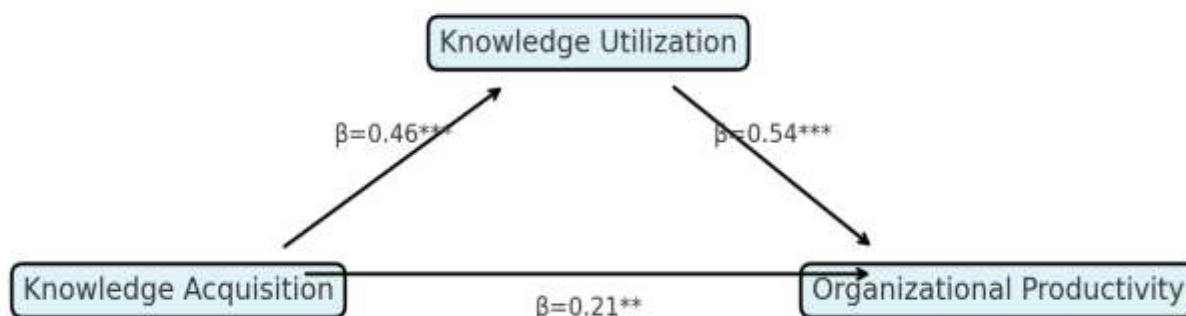
Productivity Indicator	Pre-Acquisition Mean	Post-Acquisition Mean	Z (Wilcoxon)	p-value
Successful project delivery	3.65	4.42	-12.03	< .001
Achievement of objectives	3.78	4.47	-11.56	< .001
Cost efficiency	3.69	4.38	-10.84	< .001
Adaptability and agility	3.73	4.41	-11.01	< .001
Innovation in services	3.70	4.44	-11.23	< .001
Workforce efficiency	3.72	4.39	-10.95	< .001
Overall Productivity Index	3.71	4.42	-11.43	< .001

The Wilcoxon signed-rank test confirmed that all increases were statistically significant at the 0.01 level, demonstrating that knowledge acquisition was associated with marked improvements in organizational productivity.

To further investigate the strength of the relationships, correlation analysis was performed between knowledge volume and productivity. The results revealed a moderate positive correlation ($p = 0.387$, $p < 0.001$), indicating that higher levels of knowledge acquisition were generally associated with higher productivity levels. The 95% confidence interval for the correlation ranged from 0.262 to 0.499, providing further evidence of robustness.

Finally, mediation analysis was conducted to test whether knowledge utilization acted as the mechanism through which acquisition influenced productivity. Using bootstrapped regression analysis with 5,000 resamples, the results showed that acquisition significantly predicted utilization ($\beta = 0.46$, $p < 0.001$), and utilization in turn significantly predicted productivity ($\beta = 0.54$, $p < 0.001$). When both acquisition and utilization were included in the regression predicting productivity, the direct effect of acquisition decreased in magnitude (from $\beta = 0.38$ to $\beta = 0.21$) but remained significant, while the indirect effect through utilization was also significant. The bootstrapped 95% confidence interval for the indirect effect ranged from 0.15 to 0.29, excluding zero and thereby confirming mediation. Figure 1 illustrates the mediation model and standardized path coefficients.

Figure 1. Mediation Model of Knowledge Acquisition, Utilization, and Productivity



Note. SEM path diagram with standardized coefficients: Acquisition $\rightarrow$ Utilization = 0.46**, Utilization $\rightarrow$ Productivity = 0.54***, Acquisition $\rightarrow$ Productivity direct effect = 0.21**, indirect effect = 0.25***, where ** $p < .01$, *** $p < .001$.)

The results therefore support all four hypotheses. Knowledge acquisition was positively related to productivity,

positively related to utilization, and utilization was positively related to productivity. Most importantly, utilization partially mediated the acquisition–productivity link, indicating that while acquisition alone improves organizational outcomes, the gains are significantly enhanced when knowledge is actively embedded into human, structural, customer, and innovation processes.

DISCUSSION

Overview of Findings and Empirical Insights

The purpose of this study was to examine whether knowledge utilization mediates the relationship between knowledge acquisition and organizational productivity among Ghanaian service firms. The empirical results confirmed that utilization functions as a significant mechanism through which acquired knowledge enhances performance outcomes.

Hypothesis 1 (H1) proposed that knowledge acquisition is positively associated with organizational productivity. This hypothesis was supported: acquisition correlated moderately with productivity ($\rho = 0.387$, $p < .001$). However, the moderate strength of this relationship implies that acquisition alone, while necessary, is insufficient for maximizing performance. This observation aligns with the knowledge-based view (Grant, 1996) and earlier findings by Andreeva and Kianto (2021), who argued that competitive advantage depends not merely on possessing knowledge resources but on their activation and application.

Hypothesis 2 (H2) posited that knowledge acquisition positively influences knowledge utilization. The data supported this relationship, indicating that firms that acquire diverse regulatory, customer, and competitor knowledge tend to deploy that knowledge more effectively across human, structural, and innovation domains. This aligns with Donate and de Pablo (2020) and Wu et al. (2024), who found that knowledge acquisition enhances absorptive capacity and the ability to embed knowledge into decision processes and innovation routines. Within Ghanaian service firms, acquisition created the foundation for utilization by providing informational inputs that were subsequently transformed into organizational practices and process improvements.

Hypothesis 3 (H3) predicted a positive relationship between knowledge utilization and productivity. This hypothesis was strongly supported: utilization significantly enhanced productivity outcomes, particularly in human capital development, decision-making, and innovation performance. This confirms prior evidence that utilization, rather than accumulation, is the pivotal determinant of firm competitiveness (Farooq, 2022). Firms that embedded knowledge into workflows, product development, and customer management achieved higher adaptability, efficiency, and innovation capacity.

Finally, Hypothesis 4 (H4) proposed that knowledge utilization mediates the relationship between acquisition and productivity. The bootstrapped mediation analysis supported this claim, revealing that acquisition's direct effect on productivity decreased when utilization was introduced, while the indirect effect through utilization remained significant. This pattern demonstrates partial mediation and provides empirical proof that utilization constitutes the “missing middle” in the acquisition–performance chain (Mohaghegh et al., 2024; Leoni, 2022). In other words, firms that actively use acquired knowledge capture greater productivity benefits than those that rely on acquisition alone.

Theoretical Contributions

The findings contribute to theory in several ways. First, they reinforce the resource-based and knowledge-based views by showing that organizational resources gain value only when mobilized through utilization mechanisms. This advances the understanding of dynamic capabilities (Teece, 2018) by demonstrating that in emerging economies, knowledge must be transformed into routines before yielding strategic returns.

Second, the study contextualizes these theories within the Ghanaian service sector, where regulatory directives rather than market intelligence dominate as knowledge sources. This institutional embeddedness distinguishes African firms from counterparts in advanced economies and supports the notion that institutional environments

shape knowledge flows (Akinwale, 2021).

Third, the moderate effect sizes ($\beta \approx 0.21\text{--}0.54$) imply that other organizational conditions—such as absorptive capacity, leadership style, and digital maturity (Cohen & Levinthal, 1990; Zahra & George, 2002)—may further mediate or moderate the pathway between acquisition and productivity. Integrating these constructs into extended models would deepen understanding of how knowledge translates into performance in resource-constrained contexts.

Managerial Implications

For practitioners, the results underscore that success in knowledge management depends on how knowledge is used, not how much is gathered. Managers should focus on converting regulatory, customer, and market knowledge into actionable learning and innovation processes. This involves embedding knowledge in employee training, digital platforms, decision support systems, and customer engagement strategies. Firms that institutionalize such practices achieve superior cost efficiency and adaptability—consistent with Farooq (2022). Furthermore, leadership commitment to utilization can be reinforced through internal knowledge-sharing incentives and integration of utilization metrics into performance reviews and key performance indicators (KPIs).

Policy and Institutional Reflections

The study also offers insights for policymakers and regulators. Since government rules and regulations emerged as the most influential knowledge source, regulatory institutions act as central knowledge intermediaries. Policies should therefore be crafted not merely as compliance instruments but as learning-oriented frameworks that enhance organizational understanding. Dissemination via capacity-building programs, digital knowledge portals, and industry dialogues can strengthen firms' ability to interpret and implement regulatory knowledge effectively.

The findings resonate with recent African scholarship emphasizing the creation of institutional knowledge ecosystems. For instance, Osei-Tutu, Adjei, and Boateng (2024) demonstrate that public-sector knowledge-sharing cultures in Ghana foster innovation, while Adebayo and Abubakar (2023) highlight that contextual learning networks among Nigerian SMEs improve performance. Together, these works and the present findings indicate that African organizations are shifting from knowledge acquisition as an end in itself toward knowledge utilization as a driver of economic and institutional transformation.

Limitations and Alternative Explanations

Despite its robustness, the study's cross-sectional and self-reported design limits causal inference and objectivity. The temporal sequence between acquisition, utilization, and productivity cannot be fully established. Nonetheless, steps such as procedural anonymity and diagnostic checks (e.g., Harman's single-factor test) were used to minimize common method bias (Podsakoff et al., 2012). Future longitudinal or mixed-method designs could better capture the temporal evolution of knowledge processes and validate causality.

The moderate mediation effect also suggests potential confounding variables—firm size, age, digital capability, or leadership orientation—that might influence productivity. Incorporating these controls in future models could refine the mediation estimates. Finally, the Ghanaian service-sector focus, while contextually rich, limits **generalizability**. Comparative studies across manufacturing, agriculture, or cross-country samples would help determine the extent to which these findings apply in different institutional environments.

Summary

Collectively, the evidence supports **all four hypotheses (H1–H4)**, confirming that knowledge acquisition contributes to productivity both directly and indirectly through utilization. The mediation pattern underscores that the translation of knowledge into practice—rather than its accumulation—yields sustainable performance. The study thus advances both global and African knowledge management scholarship by demonstrating

empirically how utilization acts as the linchpin between knowledge resources and organizational outcomes. For theory, it validates utilization as a distinct mechanism within the knowledge-based view; for practice, it highlights that cultivating utilization-oriented cultures is essential for converting knowledge into competitive advantage.

LIMITATIONS AND FUTURE RESEARCH

Although this study provides valuable insights into the mediating role of knowledge utilization between acquisition and productivity, several limitations must be acknowledged. These limitations not only frame the scope of the present findings but also point toward fruitful avenues for future research.

The first limitation lies in the cross-sectional nature of the design. Data were collected at a single point in time, which constrains the ability to establish causal relationships among acquisition, utilization, and productivity. While mediation analysis provides evidence of the indirect role of utilization, the temporal dynamics of knowledge management are better captured through longitudinal or panel data. Future studies should therefore track firms over time to examine how acquisition and utilization evolve and how their effects on productivity unfold across different organizational life cycles.

The cross-sectional and self-reported nature of the data limits causal interpretation and introduces the possibility of common-method bias. Although diagnostic tests suggested minimal inflation, future studies should employ longitudinal, experimental, or multi-source datasets (e.g., managerial plus archival indicators) to validate directional relationships between acquisition, utilization, and productivity.

A second limitation is the self-reported nature of the data, which may be subject to social desirability and recall bias. Respondents were asked to assess their firms' knowledge practices and productivity outcomes, and such subjective assessments may not fully align with objective performance measures. Although reliability tests indicated strong internal consistency, triangulation with archival data such as financial performance indicators, innovation output, or regulatory compliance records would strengthen validity. Future research should consider mixed-method designs, integrating surveys with case studies or secondary performance data.

The exclusive focus on Ghanaian service firms provides valuable contextual depth but restricts generalizability. Subsequent research should test the mediation model across manufacturing, agricultural, and public sectors, as well as in other African and non-African economies, to assess whether institutional, cultural, or technological variations alter the acquisition–utilization–productivity dynamics.

Third, the study was conducted in the service sector of Accra, which, while knowledge-intensive and highly relevant, limits generalizability. Firms outside the service sector, such as manufacturing, agriculture, or extractive industries, may experience different knowledge dynamics. Similarly, the exclusive focus on Ghana means that contextual factors such as regulatory environments, cultural norms, and institutional structures may shape the results in ways not applicable elsewhere. Comparative studies across African countries or between African and non-African contexts could provide a richer understanding of how institutional environments condition the acquisition–utilization–productivity nexus.

A further limitation is the dominance of regulatory knowledge as a source of acquisition in the Ghanaian context. While this reflects the realities of the institutional environment, it narrows the scope of acquisition considered. Other potential sources, such as partnerships, digital platforms, or international networks, were not given equal prominence. Future research should broaden the focus to capture the role of emerging digital ecosystems, cross-border collaborations, and open innovation platforms in shaping acquisition and utilization.

Another limitation relates to the scope of mediation analysis. The present study tested only one mediating mechanism—knowledge utilization. However, other processes such as knowledge sharing, organizational culture, leadership styles, or absorptive capacity may also mediate or moderate the acquisition–productivity relationship. For example, absorptive capacity has been widely identified as a critical construct linking knowledge flows to innovation outcomes (Cohen & Levinthal, 1990; Zahra & George, 2002). Future studies could employ more complex models incorporating multiple mediators and moderators to capture the layered

nature of knowledge dynamics.

Finally, the methodological tools employed SPSS, bootstrapped regressions, and AMOS/PLS-SEM are appropriate but limited to linear models. The complex, dynamic, and potentially nonlinear relationships among knowledge processes may be better captured through advanced modeling techniques such as multilevel modeling, structural equation modeling with longitudinal data, or even computational simulations and agent-based models. Incorporating these methods in future studies would offer deeper insights into the mechanisms of knowledge management.

In light of these limitations, future research should focus on three directions. First, longitudinal and multi-method studies are necessary to establish causal pathways and validate findings beyond self-reported measures. Second, comparative research across sectors and countries will highlight contextual similarities and differences, strengthening the global relevance of African KM research. Third, theoretical extensions that incorporate additional mediators such as absorptive capacity, knowledge sharing, or digital capability will enrich understanding of how knowledge is transformed into productivity. By addressing these gaps, future studies will further refine the mechanisms that underpin knowledge management and broaden the implications for both theory and practice.

CONCLUSION

The purpose of this study was to investigate how knowledge utilization mediates the relationship between knowledge acquisition and organizational productivity in Ghanaian service firms. Guided by knowledge-based and intellectual capital theories, and tested through a survey of 210 firms in Accra, the study advanced four hypotheses. All were confirmed, establishing that knowledge acquisition contributes positively to productivity, that acquisition enhances utilization, that utilization itself improves productivity, and that utilization partially mediates the acquisition–productivity link. These findings together validate the proposition that knowledge utilization represents the missing middle in the knowledge–performance chain.

The study makes three important theoretical contributions. First, it reaffirms the resource- and knowledge-based views of the firm by demonstrating that resources in themselves are inert until activated by utilization processes. Second, it enriches intellectual capital theory by empirically confirming the centrality of human, structural, innovation, and customer capital in translating knowledge into organizational outcomes. Third, it contributes to the growing body of African knowledge management research by situating KM practices in a Ghanaian context, where regulatory directives, rather than market intelligence, dominate acquisition. This institutional embeddedness distinguishes the African case and highlights the importance of contextualizing KM theory.

The study also offers significant practical implications. For managers, the results underscore that acquiring knowledge whether from regulators, markets, or customers does not automatically yield improved outcomes. Instead, organizations must build strong utilization mechanisms that embed knowledge into training, decision-making structures, innovation processes, and customer management systems. Firms that cultivate such practices are more likely to achieve cost efficiency, innovation, and long-term competitiveness. For policymakers, the results highlight their dual role as both regulators and knowledge providers. Since government rules and directives were the most important source of knowledge acquisition, regulators must ensure that policies are framed as actionable and learning-oriented inputs, supported by sectoral workshops, capacity-building programs, and digital dissemination platforms. By strengthening the usability of regulatory knowledge, governments can foster greater productivity and innovation within firms.

Despite its contributions, the study acknowledges limitations arising from its cross-sectional design, reliance on self-reported measures, and narrow sectoral scope. Future research should adopt longitudinal and multi-method approaches, expand across sectors and countries, and incorporate additional mediators such as absorptive capacity, knowledge sharing, and digital capability. Such extensions will further refine our understanding of how knowledge practices shape performance outcomes.

In conclusion, this study demonstrates that knowledge acquisition alone is insufficient for improving productivity in emerging economies. It is the systematic utilization of knowledge—through human capital,

structural improvements, innovation, and customer relationships that transforms external inputs into competitive advantage. By highlighting utilization as the linchpin of organizational performance, this study bridges theoretical insights with practical imperatives and offers a roadmap for managers and policymakers seeking to enhance productivity in Ghana and similar contexts.

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