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Knowledge Management Dimensions and Sustainable Competitive Advantage (SCA) of Deposit Money Banks: Mediating Role of Innovation

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Abstract

The primary objective of the current research was to explore how the Knowledge Management (KM) processes of Deposit Money Banks (DMBs) in Makurdi Metropolis contribute to their Sustainable Competitive Advantage (SCA). Additionally, this study determined to evaluate how innovation helps the banks to retain their competitive advantage. A total of 265 valid samples were collected from a population of 14 DMBs and 933 respondents were selected from these DMBs. The data was analysed using Structural Equation Modelling (SEM). While testing the assumptions, hypotheses 1-3 supported the proposition that KM dimensions; acquisition ($\beta = .32, p < .05$), utilization ($\beta = .26, p < .05$), and storage ($\beta = .24, p < .05$) were directly related to SCA. No evidence was found for the full mediating role of innovation in relation to KM dimensions and SCA, as demonstrated by the data. However, innovation does play a role in certain aspects of KM by demonstrating that acquisition ($\beta = .69, p < .05$), utilisation ($\beta = .21, p < .05$), and storage ($\beta = .18, p < .05$) are positively associated with innovation in DMBs. The findings indicated that managers who responded to KM were more innovative. The importance of DMBs lies in the recognition that knowledge is not a simple concept. A commitment to new discoveries and to new understandings is not sufficient. Enterprises need to pursue knowledge that enables them to add value.

Keywords: deposit money banks (DMBs), innovation, knowledge acquisition, knowledge management (KM), knowledge storage, knowledge utilisation, sustainable competitive advantage (SCA)

Introduction

The nature of work is changing globally and organisations are facing increasing competition, turbulence, and complexity (Gifford, [2022](#)). Recent

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trends represent competitive pressures and world dynamics. For instance, the Russia-Ukraine war and COVID-19 pandemic have drastically altered how organisations respond to change (Tosun & Eshraghi, [2022](#)). Through these changes, work patterns have evolved, becoming more decentralized, flexible, and knowledge based (Margariti et al., [2021](#)). Physical proximity requirements have also changed for some jobs, with more emphasis on remote, technology-driven, and hybrid working arrangements (Margariti et al., [2021](#)). Consequently, there is an increase in the automation and teleworking, which suggests that organisations must adapt quickly and develop capabilities to manage their knowledge stocks effectively (Mahdi et al., [2019](#)). As a strategic resource, knowledge has traditionally been viewed as one of the most important tools that an organisation may use to enhance its competitive [advantage](#) (Sahibzada et al., [2022](#)). Therefore, Mahdi et al., ([2019](#)) argued that the organisations must exploit their knowledge assets methodically if they wish to maintain Sustainable Competitive Advantage (SCA).

Previous studies argued that it is becoming increasingly complex and challenging to achieve SCA in a globalized and knowledge-based economy (Chen et al., [2022](#); Sahibzada et al., [2022](#)). From the perspective of the resource-based view (RBV) theory, building and developing resources along with the capabilities is fundamental to gain SCAs which increases firm performance (Barney [2001](#); Barney & Arikan, [2005](#)). Moreover, developing capabilities is essential due to globalization and technological advancements which helps to shorten the product life cycles, and thus, firm advantages tend to last only for a short period of time (Cuthbertson & Furseth, [2022](#)). This, therefore, requires organisations to build capabilities that are difficult to imitate (Quartey, [2019](#)). The current study argued that in order to achieve SCA, developing knowledge management (KM) and innovation capabilities is essential. Therefore, organisations may achieve SCA by implementing KM strategies and coming up with novel ideas in ways that differentiate them from competitors in the long-term (Ali & Tang, [2022](#)). This is because employee knowledge is a valuable resource that could help to create an SCA and intellectual capital (Quartey, [2019](#)).

Despite the increased relevance and strategic nature of KM, not many studies attempted to examine how KM dimensions' influence SCA directly and indirectly through firm level innovation from the perspective of developing countries. The exploration of this link is important because

organisations may improve SCA through knowledge. It could be done either by internally distributing knowledge in a way that other organisations find it hard to copy or by creating superior KM capabilities in a way that fosters ongoing innovation. KM strategies must play a key role in an organisation's ability to maintain a competitive advantage through knowledge creation, sharing, distribution, and retention (Quarthey, [2019](#)). It has been shown in the current study that knowledge may contribute to industry competitiveness by enabling capability differentials and superior performance through innovation. Although, knowledge research achieved significant theoretical and conceptual advancement, little research has been conducted on how knowledge and innovation may enhance competitive advantage within industries, such as banking in developing countries. Across the industries, knowledge has a different strategic value and perhaps the banking industry is no exception to this trend. Pal et al., ([2021](#)) noted that there is a wide range of technological advances and innovations in the global financial sector driven by digital technologies that is changing the landscape of the sector. Therefore, as the financial services industry is evolving and changing rapidly, how they manage knowledge is increasingly becoming important.

Several studies indicate that firm competitive advantage is influenced by knowledge resources that are complex, embedded, tacit, and firm-specific (e.g Spender & Grant, [1996](#); Saqib, et al., [2017](#)). Since there is little empirical evidence regarding how knowledge contributes to SCA in developing countries, the current paper examines this view from the perspective of the banking industry in Nigeria. It seeks to answer the following question: Does KM influence the SCA of Nigerian deposit money banks (DMBs)? This paper is significant, because it extends the debates on how strategic management and KM are intertwined from the perspective of the banking industry. Moreover, it provides information about the Nigerian banking industry and firm-level perspective on how KM directly influences SCA and indirectly through firm-level innovation.

Review of Related Literature

Knowledge Management (KM) Practices

KM refers to the process by which an organisation acquires, shares, and uses the knowledge in order to improve its survival and performance (Deepak et al., [2022](#)). Learning and performance are enhanced when

knowledge is created, acquired, captured, shared, and used (Rianto et al., [2021](#); Swan et al., [1999](#)). This means that KM efforts may benefit organisations by enabling them to share insights, reduce redundancy, and training time for new employees. It may help to retain intellectual capital, as employees move into and out of employment and adapt to changing environments and markets (Nursal et al., [2022](#)). KM describes a set of practices that includes identification, creation, presentation, dissemination, and allowance of insights and experiences to be adopted by the organisations.

Previous studies identified knowledge acquisition, knowledge sharing, and knowledge utilization as the three elements of KM (Demir et al., [2021](#); McShane & von Glinow, 2000). Knowledge acquisition describes an organisation's capability to gather information, ideas, and insights from its environment (Ezigbo, [2011](#)). In knowledge sharing, employees are able to share their insights and experiences, allowing projects to be completed more quickly, and efficiently (Singh et al., [2021](#)). According to Stoermer et al., [2021](#), most of the knowledge sharing occurs through the processes of communication that enable fast and fluid exchange of important information across organisational boundaries. Unhealthy divisions, rivalries, and the fear of losing control prevents employees from knowledge sharing (Arora [2002](#); McShane & Glinow, [2000](#)). Appropriate motivation through rewards, recognitions, incentives, bonuses, and compensation may enhance knowledge sharing and utilisation (Ezigbo [2011](#)).

Innovations in Business Organisations

The operations of DMBS have been revolutionized through financial innovation (Iman, [2019](#); Olatunji, [2020](#)). These innovations led to observe changes in how products, services, and solutions are developed and delivered (Mishchenko et al., [2021](#)). The reengineering of business processes led to the fundamental rethinking and redevelopment of processes designed to improve essential contemporary performance measures, such as cost, quality, source, and speed of operations (Hammer & Champy, [1993](#)). The implication of these innovations is that tools and techniques are combined, enabling the technologies to facilitate changes throughout the organisation and to deliver services that customers require (Olatunji, [2020](#)). This led to the identification of new applications and markets, skills, and services (Arora, 2009). When information technology is aligned with

business goals, it supports business processes more effectively leading to quality service delivery.

Sustainable Competitive Advantage (SCA)

Competitive advantage describes the ability of an organisation to outperform its rivals or competitors and generate a higher level of economic value (Gupta, et al., [2014](#)). This means that a firm's ability to meet customer demands is determined by how well it uses its organisational resources as compared to its competitors (Mahdi et al., [2019](#)). SCA means that an organisation's current or potential competitors cannot easily replicate the company's competitive advantage as it is expensive to duplicate (Kuncoro & Suriani, [2018](#)). Kuncoro and Suriani, ([2018](#)) argued that SCA may best be achieved by an organisation that executes a strategy to create value, different from what competitors offer. According to Haseeb et al., ([2019](#)), it is possible to develop a competitive advantage based on a variety of factors. These factors may be derived from a firm's operations, quality delivery, management system, and superior products along with services (Mirati et al., [2021](#)). It is not sufficient to gain an advantage over competitors, rather it is imperative to consistently maintain a competitive edge (Demir et al., [2021](#)).

Research Hypotheses

In order to achieve competitive advantage in a highly competitive market, firms must continually identify or reshape their core competencies, acquire unique technologies, develop, and accumulate intellectual property (Srivastava et al., [2013](#)). Previous research suggested that different SCAs result in better performance for some organisations than others. Therefore, organisations must identify specific sources of SCA that are peculiar to them (Huang et al., [2015](#); Quartey, [2019](#)). Moreover, previous findings proposed that a firm's competitive advantage is determined by two major factors, that is, the endogenous forces derived from its resources and capabilities along with the exogenous forces derived from its market position (Huang et al., [2015](#); Kuncoro & Suriani, [2018](#)). It has been proved that organisations may exploit their knowledge resources to enhance their competitive performance (Mahdi et al., [2019](#); Quartey, [2019](#)). Knowledge has been perceived as a strategic resource and must be managed effectively to promote the performance of the organization (Chen et al., [2022](#); Ode & Ayavoo, [2020](#)). This means that how an organisation manages its

knowledge resources could determine how they outperform their competitors. It is possible to develop unique knowledge repositories which may give them access to bespoke knowledge stock that could lead to competitive advantage (Mahdi et al., [2021](#); Zhang et al, [2022](#)). According to Ndlela and Du Toit ([2001](#)), creating a knowledge-friendly culture is an extremely challenging part of a successful KM project. It takes strong leadership and a change in attitudes and behaviours to successfully implement KM and to succeed (Quartey [2019](#)).

Teece ([2007](#)) defines knowledge acquisition as the process by which organisations leverage and acquire existing and new knowledge. From the perspective of open innovation, a firm may take advantage of technological and commercial opportunities by combining internal and external knowledge to adapt to a dynamic environment (Chesbrough et al., [2018](#)). As a fundamental principle of KM, knowledge sharing facilitates the generation of solutions and efficiencies that provides an initial value for a firm (Lin, [2007](#)). Although, knowledge sharing has been distinguished from the related term "knowledge transfer" (Wang & Noe, [2010](#)). Wang and Hu, ([2020](#)) suggested that knowledge sharing is; however, one aspect of knowledge transfer, which has traditionally been used to describe the objective transfer of knowledge between organizations, divisions, or units. Knowledge sharing may enhance creativity and promote fewer redundancies, and together with aforementioned benefits, it might lead to generate SCA (Mahdi et al., [2019](#); Wang & Hu, [2020](#)). Ouakouak and Ouedraogo, ([2018](#)) argued that whilst knowledge sharing is an integral part of KM, it does not guarantee that the knowledge members share would actually be used (Ouakouak & Ouedraogo, [2018](#)). Xiao and Bao ([2022](#)) argued that knowledge utilization leads to incremental benefits for an organization; however, the benefits may only be accrued if it is utilized. The following hypotheses has been formulated to guide this research.

H₁: Knowledge acquisition has a positive effect on the SCA of DMBs.

H₂: Knowledge sharing has a positive effect on the SCA of DMBs.

H₃: Knowledge utilization/application has a positive effect on the SCA of DMBs.

The Mediating Role of Innovation

Previous studies demonstrated a positive relationship between KM practices and innovation performance (Alegre et al., [2013](#)). These findings

showed that a gaining SCA over competitors may only be gained through innovation. The findings showed that gaining SCA over competitors is only possible via innovation (Kör & Maden, 2013). Studies represent that organisations with a KM process operate more efficiently, deploy resources more effectively, and are more innovative than those without (Durmuş-Özdemir & Abdukhoshimov, 2018). Through innovation, firms may offer new products and services to their customers while employing active learning, which improves their ability to react to changing market demands. Firms that utilize active learning have information, knowledge, and skills needed to predict and study customer needs better than competitors which could increase an organisation's SCA. Additionally, these firms were also able to use new and innovative technologies in order to innovate better and sustainably. An organisation's ability to learn better allows it to assess its competitors' weaknesses and strengths, which in turn improves efficiency. It results in a decreased failure rate and provides opportunities to introduce new ideas and products. Therefore, this study proposes the following hypotheses:

H4: Innovation mediates the relationship between KM and SCA of DMBs.

Methodology

The current study adopted a survey design. The data was generated from a population of 14 DMBs and 933 respondents (See Table 1) distributed across the DMBs based in Makurdi Metropolis, Nigeria. The context of DMBs was selected, because the sector extensively relied on KM processes and innovation (Nnabuife et al., 2015). Moreover, with the emergence of new FinTech firms, competition has increased in the sector, as these digital-savvy firms are challenging the financial services landscape in developing countries by introducing new and alternative solutions (Iman, 2019; Olatunji, 2020). Additionally, DMBs demonstrated their impact on society through financial innovation in Nigeria (Ode & Ayavoo, 2020). By using the context of financial services, this study may explore the research variables and understand how innovation, KM, and SCA are connected within the industry. A questionnaire was designed to measure KM dimensions, innovation, and SCA. The questionnaire comprised 32 questions extracted from previous studies on KM processes, innovation, and SCA. The questionnaire used was designed using a Likert-scale format and

respondents were expected to select options that best represent their opinion.

Table 1
Sample Determination

S No.	Banks	No. of Branches	No. of Employees	Sampling per Bank	Buffer margin (10%)
1	Access Bank Plc	4	137	41	4.1
2	Union Bank	3	102	31	3.1
3	First Bank of Nigeria, Plc	4	180	54	5.4
4	United Bank for Africa	4	88	26	2.6
5	Fidelity Bank	4	74	22	2.2
6	Zenith Bank	3	76	23	2.3
7	Eco Bank	3	42	13	1.3
8	Guaranty Trust Plc	2	80	24	2.4
9	Sterling Bank Plc	2	26	8	0.8
10	FCMB	2	24	7	0.7
11	Unity Bank	2	34	10	1.0
12	Polaris Bank	4	40	12	1.2
13	Stanbic Bank Plc	2	16	5	0.5
14	Heritage Bank	1	14	4	0.4
	Total	42	933	280	28

A drop-off-pick-up technique was used to deliver the questionnaire to each of the DMBs. As shown in Table 1, this research followed a three-step approach to compute the sample size. In the first step, the study adopted the recommendations of Chaokromthong and Sintao (2021) to calculate the sample size, using the following formula: $n = \frac{N}{1+N(e^2)}$ where: N = population size; n = sample size and e = level of significance at 0.05 (95% confidence level). From a population of 933, the estimation yielded a sample of 280 respondents. The second step used a stratified sampling technique to ensure that each of the DMBs were represented in the sample. Rahman, et al., (2022) noted that using this approach ensures that all subgroups are adequately represented. This was computed using Bowley's population allocation formula (Pandey & Verma, 2008). Each stratum was computed by multiplying the number of employees for each DMB by the calculated sample size (280) and dividing the result by the total population

(933). For instance, the sample for Access Bank was computed as follows: $\frac{137*280}{933} = 41$. In the final step, to increase the response rate, a buffer margin of 10% was used.

Data Analysis and Results

Although, demographic characteristics cannot be used to make inferences or affect the level of analysis. However, reporting relevant descriptive statistics may provide some insight into the overall composition and description of respondents and DMBs used in this study. Approximately, 72% of the sample participants were male. This dominance may be due to the sector and culture in which the study was conducted, with more males likely to occupy leadership positions. Furthermore, majority of the managers (69%) possessed 6-10 years of experience, supplying this study with a suitable pool of experienced respondents. In this study, the majority of respondents (59%) were between 31-50 years old, while 41% were under 30 years old. Nearly, all respondents (99%) were graduates or postgraduates.

In the current study, exploratory factor analysis (EFA) and confirmation factor analysis (CFA) were used with the purpose to assess the robustness of the research constructs, examine the initial factor structure, and assess the measurement items. It is believed that both EFA and CFA may be viewed as a progression towards SEM rather than as conflicting techniques (Blunch, 2016). In a CFA, the parameter values are set a priori and the hypothesised relationships are confirmed by setting the parameters a priori (Harrington, 2009). According to Table 1, the skewness statistics and kurtosis statistics for all variables ranged from -2 to 2, the standard deviations from -2 to 2, and the kurtosis statistics from -3 to 3. Accordingly, the distribution of the research data was normal (See Table 2).

Table 2

Assessment of Normality (Skewness and Kurtosis)

Variables	Min	Max	Skew	C.R.	Kurtosis	C.R.	α	n
Knowledge Storage	3.600	5.000	.481	3.195	-.159	-.530	0.70	5
Knowledge Utilisation	4.000	5.000	-.356	-2.367	-1.355	-4.502	0.72	4
Knowledge Acquisition	3.833	5.000	.044	.294	-.701	-2.328	0.70	6

Variables	Min	Max	Skew	C.R.	Kurtosis	C.R.	α	n
Innovation	3.600	5.000	-.748	-4.971	.170	.565	0.81	5
SCA	4.000	5.000	.635	4.219	1.381	4.590	0.73	12
Multivariate					.023	.023		

Note. $N=265$

Table 3

Correlation

Variables	1	2	3	4	5
Knowledge Acquisition	1				
Knowledge Utilisation	-.113	1			
Knowledge Storage	.140*	-.282**	1		
Innovation	.706**	.082	.217**	1	
SCA	-.230**	.244**	.151*	-.028	1

Note. *. Correlation is significant at the 0.05 level (2-tailed); **. Correlation is significant at the 0.01 level (2-tailed; $n=265$).

As shown in Table 3, the correlations coefficient ranged between $r = 0.028$ to $r = 0.706$, indicating that a relationship exists between knowledge acquisition and SCA ($r = -.230$; $p < .05$), as well as knowledge utilisation and SCA ($r = .244$; $p < .05$), knowledge storage and SCA ($r = .151$; $p < .05$). The correlation between innovation and SCA ($r = -.028$; $p > .05$) was not significant. Table 4 shows the results of EFA.

Table 4

Factor Loading and Reliability Statistics

	Questions	Factor Loading	Cronbach's α
Knowledge Acquisition	KA1	.500	0.70
	KA2	.623	
	KA3	.927	
	KA4	.994	
	KA5	.713	
	KA6	.985	
Knowledge Storage	KS1	.964	0.72
	KS2	.869	
	KS3	.934	
	KS4	.978	
	KS5	.840	

	Questions	Factor Loading	Cronbach's α
Knowledge Utilisation	KU1	.924	0.70
	KU2	.963	
	KU3	.891	
	KU4	.964	
Innovation	IN1	.927	0.81
	IN2	.994	
	IN3	.713	
	IN4	.985	
	IN5	.964	
Sustainable Competitive Advantage	SCA1	.879	0.73
	SCA2	.963	
	SCA3	.945	
	SCA4	.875	
	SCA5	.975	
	SCA6	.947	
	SCA7	.974	
	SCA8	.745	
	SCA9	.984	
	SCA10	.943	
	SCA11	.914	
	SCA12	.969	

Kaiser-Meyer-Olkin index, a method to assess an EFA's effectiveness was used in order to measure the sampling adequacy (Kaiser, 1970). Williams et al. (2010). For instance, it recommended that a factor analysis rule of thumb of 0.50 is often used (the KMO index usually ranges from 0 to 1. With a KMO of 0.913). This study validated that the sample was adequate and the variables were appropriately chosen for factor analysis. In the current study, Bartlett's test of sphericity was also used to determine whether the correlation matrix is a matrix of identity ($p < .05$) or not. It shows that matrices are not identity matrices, which allowed factor analysis to be done ($p < .05$). For the five structures, the Total Variance explained was 91% (90.586).

Table 6*Test of Hypotheses/Hypothesis Testing*

Predictors	Outcome	Estimate	S.E.	C.R.	<i>p</i>	Remark
Knowledge Acquisition	Innovation	.698	.047	17.154	.000	Supported
Knowledge utilisation	Innovation	.210	.035	5.152	.000	Supported
Knowledge storage	Innovation	.176	.035	4.328	.000	Supported
Knowledge Acquisition	Sust.Com. Adv	-.316	.064	-3.966	.000	Supported
Knowledge utilisation	Sust.Com. Adv	.260	.034	4.536	.000	Supported
Knowledge storage	Sust.Com. Adv	.239	.034	4.212	.000	Supported
Innovation	Sust.Com. Adv	.123	.058	1.491	.136	Not Supported

In the current study, to assess the measurement model, Standardised Root Mean Square Residual (SRMR), observed normed χ^2 (χ^2/df , Root Mean Square of Approximation (RMSEA), Normed Fit Index (NFI), Goodness of fit (GFI), Adjusted Goodness of fit (AGFI) and Comparative Fit Index (CFI) index were used to measure the model fit indices. The results showed that $CMIN/df = .373$, $p \Rightarrow .5$, $AGFI = .80$, $GFI = .96$, $RMR = 0.01$, $SRMR = .0981$, $NFI = .90$, $IFI = .91$, and $RMSEA = .18$. The model fit indices indicate that the results met the acceptable threshold to accept the measurement model and structural model (see Figure 1), thus it may be used to test the research hypotheses.

Table 5 presents the results of the test of hypotheses. The results supported hypotheses one to hypotheses three, indicating a direct relationship between KM and SCA. The hypothesis test indicates that knowledge acquisition contributes positively to the development of SCA ($\beta = -.252$, $t = 3.966$, $p < .05$, $r = 0.21$). Resultantly, the SCA decreases by 0.316 when knowledge acquisition increases by 1. In absolute terms, the probability to obtain a critical ratio of 3.966 was less than 0.001. Therefore, the regression weight for knowledge acquisition was significantly different from zero at the 0.001 level (two-tailed) in predicting SCA. Knowledge storage also appears to be associated with SCA ($\beta = .141$, $t = 4.212$, $p < .05$, $r = 0.21$). As a result, when knowledge storage increases by 1, SCA increases by 0.239. Therefore, the probability to get an absolute value of 4.212 as a critical ratio was less than 0.001. In other words, knowledge

storage plays a significant role in the prediction of SCA with a regression weight that is significantly different from zero at the 0.001 level (two-tailed).

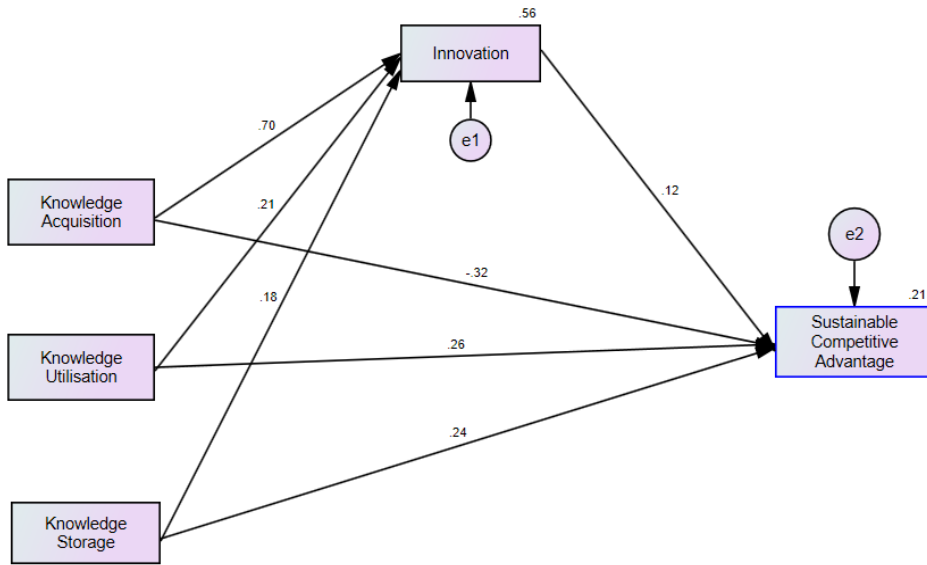
The results also showed that the relationship between knowledge utilisation and SCA ($\beta = .154, t = 4.536, p < .05, r = 0.21$) is significant. This means that when knowledge utilisation goes up by 1, SCA goes up by 0.26. This means that the probability to get a critical ratio of 4.536 in absolute value is less than 0.001. Strictly speaking, the regression weight for knowledge utilisation in the prediction of SCA is significantly different from zero at the 0.001 level (two-tailed). As part of the mediation analysis, the direct relationship between KM processes and innovation was examined. The results indicated that three KM processes, that is, knowledge acquisition ($\beta = .698, t = 17.154, p < .05, r = 0.56$), knowledge utilisation ($\beta = .210, t = 5.152, p < .05, r = 0.56$), and knowledge storage ($\beta = .176, t = 4.328, p < .05, r = 0.56$) have a significant and positive relationship with innovation. The standardised direct effects are shown in Figure 1.

The findings showed that there is a positive relationship between innovation and SCA ($\beta = .123, t = 1.491, p > .05, r = 0.56$); however, it is not significant. This indicates that there is a .136 chance to get a critical ratio as large as 1.491 in absolute value. According to the research, KM processes account for 56.3% of the variance in innovation. The findings suggested that the predictors of SCA explain 20.9 percent of its variance. As for indirect effects, the standardized indirect (mediated) effect of knowledge storage on SCA was .022. Moreover, knowledge storage may directly affect SCA (unmediated). Total (direct and indirect) knowledge utilization is associated with a .286 advantage in SCA. This study showed that the standard indirect (mediated) effect of knowledge acquisition on SCA was .086. According to the results, innovation showed an average indirect (mediated) effect of .000 on SCA. The effect of innovation on SCA may also be unmediated (direct) (in addition to any indirect (mediated) effect).

It has been argued that KM processes may partially mediate SCA; however, the hypothesis cannot be substantiated since innovation does not directly influence SCA. However, KM processes and innovation are very closely linked in DMBs in Nigeria

Figure 1

Path Model



Discussion

The current study confirmed that knowledge is one of the most valuable intangible resources organizations could use to generate different firm-level outcomes (Chen et al., 2022; Mahdi et al., 2022; Quartey, 2019). Consistent with previous findings, it is clear that KM is an essential tool to improve organisational performance and SCA (Ali & Tang, 2022; Sahibzada et al., 2022). This study analysed the role of specific KM dimensions (acquisition, storage, and utilisation) to influence the SCA of DMBs in Makurdi Metropolis, both directly and indirectly through innovation. In the test of hypotheses, the results supported hypotheses one to three, providing evidence that KM dimensions (acquisition, utilization, and storage) are directly associated with SCA.

The results suggested that knowledge acquisition is positively associated with SCA. This is in line with the findings of Akpotu and Lebari (2014), which determined that organisations may gain SCA by acquiring the correct knowledge. This means that an organisation’s ability to source for relevant knowledge from internal and external sources is vital to the securing SCA (Nnabuife et al., 2015). Therefore, firms need knowledge acquisition to identify and collect external information, important to their

operations in complement to their absorptive capabilities (Ouakouak et al., [2018](#); Quartey, [2019](#)). The findings of this study also indicated that knowledge storage influences SCA. Previous studies confirmed these findings. For instance, McShane & von Glinow ([2000](#)), asserted that managing knowledge improves an organisation's ability to acquire, share, and use information in a way that contributes to its survival and success. This means that organisations must retain knowledge to increase its value and reduce the cost of searching for similar knowledge in the future. Previous findings showed that there is a link between an organisation's capacity to store knowledge and performance (Jasimuddin, [2005](#)). Furthermore, the results of the current study showed a significant and positive association between knowledge utilisation and SCA. These findings were supported by previous research showing that KM practices have a meaningful effect on SCA (Waziruddin, [2021](#)). It also supported the notion that knowledge is useless if it can't be applied to solve organisation's problems (Ode & Ayavoo, [2020](#)).

Whilst the findings did not show support for the mediating role of innovation; however, the results demonstrated a strong relationship between acquisition, storage, utilisation, and innovation. This suggests that in the context of DMBs, innovation may not be the only factor mediating the relationship between KM processes and SCA because of the incremental nature of innovation by traditional DMBs. The findings confirmed the link between KM dimensions and innovation. This study differs from previous studies, such as Obeidat et al., ([2021](#)) where innovation was determined to mediate the association between KM dimensions and SCA. This may be due to context-specific factors and the way technology is applied by traditional DMBs.

Conclusions

In order to be effective, KM must be used across organisations; however, individual perceptions of its value may determine participation. The current study attempted to estimate the extent to which KM dimensions influence SCA and how innovation mediates this relationship. The results confirmed the importance of knowledge utilisation, knowledge acquisition, and knowledge storage to enhance competitive advantage. Innovation and competitive advantage requires KM practices. The ability to predict and respond to competition is a fundamental asset in the era of knowledge economy. As the findings indicated, for innovation to occur, an individual

has to first understand the organisation's internal and external knowledge resources. . Additionally, knowledge must freely flow throughout an organisation. Innovation is more likely to occur if knowledge is disseminated effectively at all levels within an organisation and between departments. This is how more people become familiar with new knowledge that interacts with their existing knowledge. The final quality to be considered about innovation is that it constitutes a response. Being responsive increases the likelihood that an organisation would be innovative. It is crucial to consider the impact of the knowledge of workers on managerial decision-making effectiveness in order to understand how they may contribute to better results. Although, knowledge is a complex concept, management must recognize that it is neither simple nor singular. Committing to new discoveries and better understanding of the world isn't enough. It is important to identify knowledge that may increase the value of an organisation.

Recommendations

Understanding KM may contribute to improve SCA and requires deeper analysis of managers' interest in knowledge. Future research should evaluate the differences among industries and the importance of personal characteristics along with knowledge development to estimate their relative importance in the future. Due to the fact that these relationships have not been fully explored, the current study recommends that more studies must be conducted regarding industries where knowledgeable workers play a more prominent role. Moreover, KM orientation as a supporting strategy should be carefully examined in future research on managers' attitudes concerning strategic management and human value.

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