



Knowledge Management And Company Performance

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Abstract: It was observed that studies that determined the effects of knowledge-management practices on the performance of the manufacturing sector in Nigeria were scanty. This prompted an investigation into how knowledge-based factors - knowledge creation and knowledge sharing influenced the performance of a food and beverage manufacturing company in Oyo State, Nigeria.

A survey research design was the basis for carrying out the study. The questionnaire was employed for data collection. Data were collected on a four-point Likert scale having values that ranged from strongly disagree, 1, to strongly agree, 4. The sample size was determined based on Slovin's formula. 161 employees of the company were involved in the study. Descriptive and inferential statistics were used for data analysis.

The findings of the study indicated significant positive effect ($\beta = .195$, $t = 2.264$, $p < .05$) of knowledge creation on company performance as well as significant positive effect ($\beta = .747$, $t = 8.643$, $p < .05$) of knowledge sharing on company performance. However, knowledge sharing indicated more potential to contribute to company performance. These findings signified positive effect of knowledge management on performance.

The results of this study led to the conclusion that both knowledge creation and knowledge sharing played a pivotal role in strengthening the competitiveness of the studied company. Therefore, there was need for more effort to be made in making new knowledge available in the company and to ensure that it got to individuals and groups in the company as a means of catalysing innovation.

Index Terms - Company Performance, Knowledge Creation, Knowledge Management, Knowledge Sharing,

I. INTRODUCTION

Knowledge management consists of knowledge-based factors such as knowledge creation and knowledge sharing that affect organisational performance. Attaining high performance levels is essential for sustaining the business of an organisation in a competitive environment. For this reason, business organisations make effort to ensure that the goods and services they offer for sale are up to date in meeting the needs of their customers. Achieving this goal requires, among other things, the application of knowledge management practices to business operations. A review of extant literature indicated studies that investigated how knowledge management affected organisational performance (Shahbakhsh, 2013; Berraies et al., 2014; Derakhshan et al., 2016). However, the literature indicated insufficient exploration of how knowledge management influenced the performance of the manufacturing sector in Nigeria. This observation prompted an investigation of the effects of knowledge management on the performance of a food and beverage manufacturing company in Oyo State, Nigeria.

1.1 Objectives and Research Questions of the Study

The broad objective of the study was to determine the effect of knowledge management on the performance of a food and beverage manufacturing company in Oyo State, Nigeria while the specific objectives were to:

- I. Examine the effect of knowledge creation on the performance of the company.
- II. Investigate the effect of knowledge sharing on the performance of the company.

The research questions of the study were:

- I. What is the effect of knowledge creation on performance?
- II. How does knowledge sharing affect company performance?

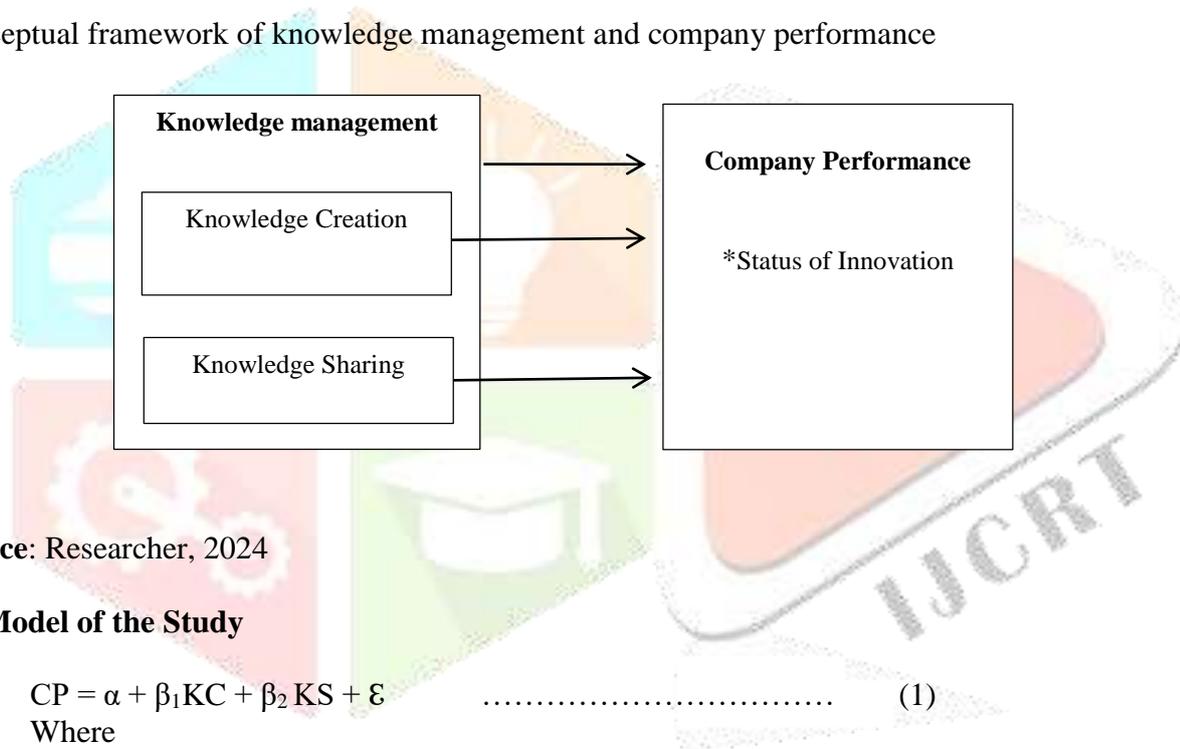
1.2 Hypotheses of the Study

The following were hypothesised for the effects of knowledge management on performance:

- H₀₁: Knowledge management has no significant effect on company performance
- H₀₂: Knowledge creation has no significant effect on company performance
- H₀₃: Knowledge sharing has no significant effect on company performance

Figure 1

Conceptual framework of knowledge management and company performance



Source: Researcher, 2024

1.3 Model of the Study

$$CP = \alpha + \beta_1 KC + \beta_2 KS + \epsilon \dots\dots\dots (1)$$

Where

- CP = Company performance
- α = CP-intercept
- KC = Knowledge creation
- KS = Knowledge sharing
- β₁, β₂ = Coefficients
- ε = Standard error of the estimate

II. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Company Performance

Achieving performance goals sustains a company in a competitive environment. On the other hand, failure to achieve performance goals reduces the chances of business survival. Company performance, in this regard, refers to company ability to attain set goals. When a company defines its goals as improving its innovation capability through KM practices, the result of an assessment of the company’s status of innovation gives indication of the company’s performance. Therefore, status of company innovation was used as a

measure of performance in this study. Yeşil et al. (2013), gave indication that KM, especially in relation to knowledge sharing, has implication for the innovation capability and innovation performance of companies.

2.1.2 Knowledge Management

Knowledge management (KM) is a practice by organisations that aims at ensuring the availability, dissemination, utilisation and retention of requisite knowledge to boost organisational operations and competitiveness. It is concerned with harnessing intellectual know-how to create value for organisations. Gloet and Terziovski, (2004) defined KM as the process of accessing experience, knowledge, and expertise that produces new skills, enables work performance, encourages innovation and creates customer value while Arora (2011) stated that KM is the process through which organisations use the collective experiences of people to attain strategic objectives. Attaining such objectives enhances long-term survival of organisations in competitive environments. Shannak (2010) defined KM as the process of obtaining information from databases, written sources, and people's intellect and distributing it to where it will yield benefit. The benefit that an organisation strives to derive from KM practices include attaining short-term and long-term goals. Arora (2011) posited that knowledge is a strategic resource for all types of organisations, public or private, producing goods or services while Marr and Schiuma (2001) indicated that KM is an activity that is concerned with obtaining, developing and sustaining intellectual capital in organisations.

2.1.3 Knowledge Creation

Kianto et al. (2016) defined KM as an organization's ability to develop new and useful ideas and solutions for various aspects of organizational activities, from products and technological processes to managerial practices. This makes knowledge a resource that promotes innovation. Knowledge contributes to the survival of companies in competitive environments (Colombelli et al., 2013). Knowledge creation (KC) produces new knowledge in companies that leads to innovation in the process of solving identified problems. This has the potential to solve problems such as low sales and poor market share that improve company competitiveness.

Employees working in organisations interact in the process of getting work done to produce knowledge that goes from individuals to groups and the entire organisation. Tacit knowledge within individuals produces explicit knowledge when it is shared. Tacit knowledge, such as know-hows and innovative thinking, is knowledge that is not easy to share among individuals while explicit knowledge is easier to share because it can be codified and taught (Andreev, 2022). Interactive processes such as socialisation and externalisation are means of converting tacit knowledge to explicit knowledge (Berraies & Chaher, 2014).

2.1.4 Knowledge Sharing

Knowledge sharing (KS) is a component of knowledge management that is concerned with ensuring that new knowledge permeates the nooks and crannies of an organisation among individuals and groups within the organisation. KS entails how knowledge becomes accessible to people within an organisation for use. Knowledge flows from the organisation to individuals or groups and vice versa on a continuous basis due to changing circumstances and competitive environment. KS provides an avenue for problem solving and it is enhanced by using internet technology. It is associated with the accessibility, distribution, and usability of knowledge in organisations (Al Kashari & Al Taheri, 2019).

KS process and the continuous transformation of knowledge follow the socialisation, externalisation, combination, internalisation (SECI) framework proposed by Nonaka and Takeuchi (1995) and indicated in Alqaryouti et al. (2016). Socialisation and internalisation, as components of the KS process, indicate the transformation of organisational knowledge to individual or group knowledge while externalisation and combination components constitute the process for the conversion of individual or group knowledge to organisational knowledge (Wang et al., 2016). When workers share knowledge in an organisation, the process involves tacit KS or explicit KS. However tacit knowledge is more difficult to share than explicit knowledge because tacit knowledge involves innovative thinking, know-how, and body language while explicit knowledge can be codified and taught (Andreev, 2022). The basis for tacit KS is the willingness and capacity of individuals to share what they know and use what they learn (Holste & Fields, 2010). It has also been indicated that face-to-face interaction is the main means of tacit KS while factors that promote explicit KS include: organisational procedure, handbooks, formal language, information technology systems (Huang et al., 2010). Furthermore, KS practices in an organisation represent means of preserving the organisation's

heritage and learning, encouraging the adoption of new techniques, providing answers to problems, developing core competences, and initiating new situations (Huang et al., 2010).

2.2 Theoretical Review

2.2.1 Knowledge Based View Theory of the Firm

This study was anchored on the knowledge based view (KBV) theory of the firm. The KBV focuses on knowledge as an intangible resource that constitutes the foundation of business strategy relevant to an organisation's performance in competitive environments. An important proposition of the KBV is that an organisation exists to create, transfer and transform knowledge into competitive advantage (Kogut and Zander, 1992). It follows that the people in an organisation have the capacity to create, share and apply knowledge that gives the organisation competitive advantage. Knowledge, as an intangible resource, enables firms to gain competitive advantage when it is uncommon and hard to imitate. Although the resource based view (RBV) postulates that differences in the performance of firms result when firms have valuable resources others do not have (Wernerfelt, 1984), the KBV, considered as an extension of the RBV, regards knowledge as the most strategic resource of a firm. The proponents of KBV (Grant, 1996a; Barney, 2001b; Matthews, 2003; Wang et al., 2014; Li et al., 2019) indicate that the application of heterogeneous knowledge bases among firms contribute to sustainable competitive advantage and long-term success of an enterprise. Furthermore, KBV relates valuable resources to tacit knowledge in individuals, explicit knowledge, and learning organisation. These factors relate to a firm's strategy and thereby make the KBV relevant to this study.

2.3 Empirical Review

2.3.1 Knowledge Management and Company Performance

There are studies that have empirically investigated the relationship between knowledge management (KM) and company performance based on how knowledge creation (KC) related to performance while some other studies investigated how knowledge sharing (KS) related to performance. This study determined the individual effects of KC and KS on performance as well as their combined effects. Endende et al. (2022) studied how KC practices influenced the performance of 265 employees that comprised teaching and non-teaching heads of department in public technical vocational education and training institutions in Kenya. The results of regression analysis indicated that KC had a significant influence on employee performance. It was stated in the recommendations of the study that the managers of the institutions should encourage employees to express new ideas as well as establish policies that would enable them to gain new knowledge as a means of encouraging continuous improvements in performance. Another study by Akhavan et al. (2014) used structural equation modelling (SEM) to analyse research variables and reported that no significant relationship was observed between knowledge creation processes and organizational performance. The recommendation of the study indicated that it was necessary for managers and workers to give due regard to the pursuit of knowledge management issues so as to increase the effectiveness of knowledge management in the organization.

The objective of the study carried out by Laeeque and Barbaar (2017) was to determine the interrelationship among knowledge creation, innovation and firm performance. The study involved 350 middle managers of three Pakistani telecommunication companies while data analysis was based on SEM. The study found that KC considerably influenced organizational capacity to innovate and perform exceptionally. Among the stated implications of the results of the study was the necessity for the organizational environment to be associated with a culture conducive to learning new skills, building capacities, and adopting concepts that would assist in creating more knowledge and encouraging innovative behaviour in the organisation. A study by Williams (2021) that involved 154 employees of three selected mining firms in Northern Nigeria reported that KC had negative effect on the performance of the employees.

Studies that investigated how knowledge sharing (KS) affected performance include: Babalola and Ogunsola (2018), Doğan and Doğan (2020), and Nurrachman et al. (2019). The study by Babalola and Ogunsola (2018) investigated how KS practices affected the performance of small and medium scale enterprises (SMEs) in Ibadan, Nigeria. Structured questionnaire and interviews were used in collecting data. The results of regression analysis indicated significant positive contribution of KS practices on the performance of the SMEs. A recommendation of the study was the need for government to support the SMEs to enable to afford, implement and maintain digital technologies that would enhance KS practices as a means of improving performance.

The study by Doğan and Doğan (2020) was conducted on 150 high-tech companies in Istanbul, Ankara and Antalya. It was shown in the results of the study that explicit knowledge sharing, and tacit knowledge sharing had positive effects on the performance of the companies. Nurrachman et al. (2019) also studied how KS affected employee performance at PT Tama Cokelat, Indonesia. The results of data analysis based on SEM indicated significant positive effect of KS on employee performance.

III. RESEARCH METHODOLOGY

A survey research design was adopted for this study. Data collection was carried out with questionnaire from a population of 460 employees of a food and beverage manufacturing company in Oyo State, Nigeria. The sample size was calculated from Slovin's formula, $n = N/(1+Ne^2)$, where n represents the sample size, N represents the population of study, and e is the error margin. The sample size, $n = 476/[1+476(0.05)^2] = 217$. However, data analysis was based on 74 percent response rate. Descriptive statistics produced mean and standard deviation values for the statements relating to knowledge creation and knowledge sharing. The responses were measured on a four-point Likert scale ranging from strongly disagree, 1, to strongly agree, 4. Inferential statistics, based on multiple regression analysis, was the basis for determining the effects of knowledge management on company performance.

IV. RESULTS AND DISCUSSION

4.1 Results

Table 1

Knowledge Management

Descriptive Statistics					
Knowledge Creation	N	Minimum	Maximum	Mean	Std. Deviation
There is adequate available knowledge in the company	161	1.00	4.00	2.7081	1.10476
Company makes effort to ensure that employees gain new knowledge	161	1.00	4.00	2.6149	1.03115
Company makes effort to obtain new knowledge from its external environment	161	1.00	4.00	2.7578	.97324
Company encourages employees to go for higher education	161	1.00	4.00	2.3665	1.05883
Company carries out research to determine customers' needs	161	1.00	4.00	2.5217	1.03735
Knowledge Sharing	N	Minimum	Maximum	Mean	Std. Deviation
Company employees share knowledge at formal meetings	161	1.00	4.00	2.9068	.92061
Company employees share knowledge at informal meetings	161	1.00	4.00	2.7019	1.07729
Company employees gain knowledge from more experienced employee	161	1.00	4.00	2.7826	1.04699
Company management communicates research results that determine customers' needs to employees	161	1.00	4.00	2.4286	1.03510
Company employee in various departments have easy and prompt access to new knowledge	161	1.00	4.00	2.5590	1.02983
Valid N (listwise)	161				

Source: Author's Computation, 2024

Table 1 shows mean values and standard deviations of items that measured knowledge creation and knowledge sharing. High mean values indicate high measures for the statements.

Table 2

Knowledge Management and Company Performance

Descriptive Statistics

Knowledge Creation	N	Minimum	Maximum	Mean	Std. Deviation
Company's status of innovation is enhanced due to adequacy of available knowledge in the company	161	1.00	4.00	2.7081	1.04666
Company's status of innovation is enhanced due to company effort to ensure that employees gain new knowledge	161	1.00	4.00	2.7702	.93707
Company's effort to obtain new knowledge from its external environment enhances company status of innovation	161	1.00	4.00	2.5901	.99669
Company's encouragement of employees to go for higher education enhances company status of innovation	161	1.00	4.00	2.8075	.98435
Company's research activity to determine customers' needs enhances company status of innovation	161	1.00	4.00	2.8820	.97711
Knowledge Sharing	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge sharing by company employees at formal meetings enhances company status of innovation	161	1.00	4.00	2.7205	1.03206
Knowledge sharing by company employees at informal meetings enhances company status of innovation	161	1.00	4.00	2.7950	.98817
Knowledge gained by company employees from more experienced employees enhances company status of innovation	161	1.00	4.00	2.7950	.98817
Communicating to employees research results that determine customers' needs enhances company status of innovation	161	1.00	4.00	2.9317	.96905
Having easy and prompt access to new knowledge by company employees enhance company status of innovation	161	1.00	4.00	2.8385	1.03622
Valid N (listwise)	161				

Source: Author's Computation, 2024

The mean values of statements relating to knowledge management and company performance and the standard deviations of the measures are shown in Table 2. The measures show how knowledge creation and knowledge sharing relate to company performance. Higher mean values signify higher potential to contribute to company performance.

Table 3

Knowledge Management and Company Performance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3625.869	2	1812.935	3800.665	.000 ^b
	Residual	75.367	158	.477		
	Total	3701.236	160			

a. Dependent Variable: Company Performance

b. Predictors: (Constant), Knowledge Sharing, Knowledge Creation

Source: Author's Computation, 2024

The results in Table 3 indicates that null hypothesis 1, knowledge management has no significant effect on company performance, is rejected at 5 percent level of significance $F(2,158)df = 3800.665, p < .05$.

Table 4

Unstandardized and Standardized Coefficients of KC and KS Regression Model

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.890	.159		5.590	.000
	Knowledge Creation	.195	.086	.206	2.264	.025
	Knowledge Sharing	.747	.086	.785	8.643	.000

a. Dependent Variable: Company Performance

Source: Author's Computation, 2024

Table 4 indicates that knowledge creation has significant positive effect ($\beta = .195, t = 2.264, p < .05$) on company performance. Therefore, null hypothesis 2, knowledge creation has no significant effect on company performance, is rejected at 5 percent level of significance. Table 4 also indicates significant positive effect ($\beta = .747, t = 8.643, p < .05$) of knowledge sharing on company performance. This implies the rejection of null hypothesis 3, knowledge sharing has no significant effect on company performance, at 5 percent level of significance.

Table 5

Model Summary of the Effect of Knowledge Management on Company Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.990 ^a	.980	.979	.69066

a. Predictors: (Constant), Knowledge Sharing, Knowledge Creation

Source: Author's Computation, 2024

It is shown in Table 5 that variations in knowledge creation and knowledge sharing explained 98 percent variation in company performance.

4.2 Discussion of Findings

The main objective of this study was to determine the effect of knowledge management on the performance of a company in the food and beverages industry. The findings indicated positive effect of knowledge management on company performance. The findings also indicated positive effects of components of knowledge management, knowledge creation and knowledge sharing, on performance. However,

knowledge sharing exhibited a greater potential to contribute to performance than knowledge creation. A notable implication of these findings is that the studied company should rely on individuals and groups in the company for knowledge creation and place a greater emphasis on knowledge sharing in order to enhance the status of innovation in the company. Studies that reported similar findings include Endende et al. (2022), Laeeque and Barbaar (2017), and Babalola and Ogunsola (2018). Endende et al. (2022) studied how KC practices influenced the performance of 265 teaching and non-teaching heads of department in public technical vocational education and training institutions in Kenya and reported that KC had a significant influence on employee performance.

Laeque and Barbaar (2017) determined the interrelationships among knowledge creation, innovation and firm performance. The study involved 350 middle managers of three Pakistani telecommunication companies. The findings indicated that KC considerably influenced organizational capacity to innovate and perform exceptionally. The study by Babalola and Ogunsola (2018) reported significant positive contribution of KS practices on the performance of the SMEs in Ibadan, Nigeria.

V. CONCLUSION

The outcome of this study established positive effects of knowledge management factors - knowledge creation and knowledge sharing, on the performance of a manufacturing company, implying the great role of knowledge management in contributing to the competitiveness of the company in the marketplace. While there was need to place emphasis on these knowledge management factors, a greater emphasis should be placed on knowledge sharing for quick dissemination of new knowledge to individuals and groups within the company as a means of catalysing innovation for enhanced company competitiveness. The results of the study established that knowledge sharing was more significant in creating value for a firm than knowledge creation. The results were obtained from a food and beverage manufacturing company. It is necessary for future research to have a larger scope by selecting more companies for study.

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