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Nexus Between Knowledge Management Capacity Building and Organization Productivity of Sugar Companies in Kenya

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Performance of manufacturing firms has been highly influenced by macro environmental factors ranging from political instability and socio-economic factors. As a result, knowledge management has increasingly become crucial in reducing the impact on both internal and external factors. The study aimed to determine the relationship between knowledge management capacity building and productivity of sugar companies in Kenya. The study assessed the moderating effect of transformational leadership on the relationship between capacity building and the productivity of sugar companies. This was anchored on the theory of change which explains the need for knowledge management in managing business dynamic external environment. The study adopted a positivist research philosophy and correlational research designs. Questionnaires were administered in a census survey to 218 managers working in 8 sugar companies in Kenya. Mean and standard deviation was utilized with frequencies as descriptive statistics. A simple regression was adopted to establish the relationship between knowledge management capacity building and productivity of firms. The finding revealed that the sugar firms shared knowledge, however, there was need to improve knowledge management system, knowledge retrieval and knowledge acquisition. There was significant relationship between innovative capacity building and productivity. The study concludes that there was statistically significant relationship between knowledge management capacity building and organization productivity. It is recommended that there is a need to improve the knowledge management system and policies to enhance productivity of organizations.

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INTRODUCTION

Globally, there is an increase in complexity in business due to emerging issues such as inflation and political instability that have affected the production of organizations (Widodo, 2022). In this way, firms are able to develop a more robust internal business environment that can withstand turbulence from the external environment. Otibine (2016) opines that capacity building remains crucial in enhancing organization capability, knowledge and expertise leading to high performance.

Knowledge is required to ensure the sustainability of skills and competence through knowledge management capacity building. This can be achieved through knowledge sharing, knowledge creation and knowledge acquisition. Alarj and Mohamed (2017) point out that knowledge management resources should be managed to ensure high performance of firms. This requires firms to integrate knowledge management activities through trust-building collaboration, communication and integration of building connectivity among employees (An, Deng, Chao & Bai, 2014).

Knowledge management capacity building focuses on improving an organization's ability to capture, store, and use knowledge effectively. This includes developing systems and processes for sharing knowledge, creating knowledge management policies and procedures, and promoting a culture of knowledge sharing and learning (Lam, Nguyen, Le & Tran, 2021). Knowledge management capacity building is important in ensuring a collaborative approach to innovation in organizations (An, Deng, Chao & Bai, 2014). This knowledge management facilitates knowledge sharing, knowledge acquisition and knowledge creation. Empirical information from Alarj and Mohamed (2017) on

knowledge management capacity showed that knowledge management is crucial in ensuring that knowledge is not lost but stored in the institution with a mechanism to create, acquire and share existing knowledge.

Patwary *et al.* (2023) in the study of knowledge management practices and employee performance found that capacity building culture is necessary moderating effect on the relationship between knowledge management practices and employee performance. Bharadwaj, Chauhan and Raman (2015) ascerted that knowledge management capabilities include infrastructure, structure, and culture which are required in knowledge management processes. These comprise creation/acquisition, storage, dissemination, and application. The effectiveness of knowledge management practices remain crucial in enhancing the efficiency of the organization.

Onyango, Wanjere, Egessa and Masinde (2015) assert that performance in sugar companies in Kenya is associated with organizational capabilities. Similarly, Maiyo (2020) argues that the performance of a sugar firms was measured using customer satisfaction, market share, new production, and product quality. There are sugar firms that are public and private which Kenya Sugar Board licensed after complying with relevant institutional requirements (Bowman, 2020). These organizations have managerial autonomy, which is explicitly and implicitly recognized before creation of sugar companies.

The efficiency of the public sugar and the government at large is influenced by the ability to make enterprise decisions without the influence of the political environment and ministerial bureaucracy. However, some government control and direction are inevitable since the government is exclusively responsible for performance of

public sugar companies. This is contrary to private sugar companies which enjoy high autonomy since private individuals manage them. It is only regulated by a government agency for licensing, quality assurance and trade regulation purposes.

Most of Kenya's sugarcane is grown in the western region around Nyando, Migori, Mumias, Busia, Nandi, and at the Coast. Kenya's sugar sector has significantly aided in the growth of the country. Despite being of utmost importance to the economy, it has continued to perform horribly, causing ongoing production shortfalls. Roughly 250,000 small-scale sugarcane farmers supply most of the sugarcane used in Kenyan mills. About six million Kenyans depend on the sugar sector for their livelihoods either directly or indirectly, which helps rural household economies (Kenya National Assembly, 2015).

As of 2021, there were eight sugar companies namely West Kenya Sugar Company, Butali Sugar Mills, Kibos Sugar and Allied Industries Limited, Sukari Industries Limited, Transmara Sugar Company, Nzoia Sugar Company, Muhoroni Sugar Company, and Chemelil Sugar Factory from ten in 2014 with Mumias Sugar Company and South Nyanza Sugar Company which have closed operations.

The most affected sugar companies are public companies where numerous issues have affected their productivity over the years. From around 635,700 tonnes in 2015 to 491,100 tonnes in 2018, milled sugar production has steadily decreased in recent years (Ambesta, 2020).

The nation is a net sugar importer because imports have been rising while domestic consumption is above 900,000 tonnes per year. Even yet, South Sudan, Somalia, and other Common Market for Eastern and Southern Africa (COMESA) nations receive most of Kenya's meagre sugar exports. Marketed sugar is primarily used for domestic consumption, and it generates roughly Kshs. 500 billion annually, hence supporting the sector's significance.

Most of the state-owned sugar mills are underutilised and have enormous debt loads. One of the reasons for this is they have outdated, ineffective equipment (Chisanga, Gathiaka, Nguruse, Onyancha & Vilakazi, 2014). Political influence in the choice of milling company managers has resulted in the importation of contraband sugar since corrupt officials influence the processes in sugar companies by forcing them to import illegal sugar and repackage and sell to the Kenyan market. Besides, lack of professionalism and accountability in management boards, and other business-distorting effects has had a drastic effect on productivity in sugar firms (Kenya Anti-Corruption Commission [KACC], 2010). Despite the government privatizing the majority of the sugar factories, they are still in the red because of huge debts, corruption, and comparative advantage from external competitors.

Sugar companies have long assisted sugarcane farmers to obtain revenue and employment. It has also provided the government with revenue. There are thirteen sugar companies in Kenya, however, out of thirteen sugar two public and three privates have closed operations, leaving only eight sugar companies which are under producing. The closure of the five sugar companies is associated with low productivity resulting in bankruptcy and losses among farmers from unpaid arrears. To add to the existing problems, there is an increase in cost of production making produced sugar to the existing problems, there is an increase in production cost, making produced sugar more expensive than imported sugar from Sudan and the COMESA region.

These inefficiencies might result from poor human resource' ability to draw and maintain the right skills that can propel the productivity of the public sugar organization, so as to mitigate against underfunding from the government, and poor institutional development, among other factors. Against this backdrop of limited research study in this area, the study seeks to examine the relationship between knowledge management

capacity building and the productivity of sugar companies in Kenya.

Hypothesis

H₀: There is no statistically significant relationship between knowledge management capacity building and the productivity of sugar companies in Kenya.

LITERATURE REVIEW

Theoretical Framework

The study was anchored on theory of change. The theory of change was postulated by Peter Drucker in 1954. This theory is concerned with generating knowledge about whether a program is effective (Chris, 2011). According to Drucker, the theory of change suggests that social change requires a deep understanding of the root causes of social problems and the creation of strategies that address these causes sustainably and effectively. The theory emphasizes the importance of collaboration, community involvement, and adaptive learning in creating lasting social change. The theory of change also suggests that social change is a complex and ongoing process that requires ongoing monitoring and evaluation to ensure that strategies are effective and adapted to changing circumstances.

According to Weiss (1995) theory of change suggests that the first step in carrying out any evaluation is to specify the expected outcomes, the actions to be used to achieve those goals, and the contextual factors that might influence how those activities are carried out and their capacity to do so. Capacity building involves several knowledge generation concepts that require a change in organisational culture, structure, and human behaviour for the change to be affected and translated to productivity. Hence the theory is rooted in explaining the need for knowledge management capacity building through numerous programmes that ensure the change in knowledge, innovation, human resource, and organization management.

Empirical Review

Knowledge management is crucial in developing a collaborative innovation community capacity building (An, Deng, Chao & Bai, 2014). The study indicates that knowledge management and capacity building are obtained through creating synergy in communication, collaborative integration of knowledge, and artefacts and integrating connectivity in knowledge management activities. In a study based in Malaysia, Alaarj and Mohamed (2017) aver that knowledge management capacity building remains an important aspect of the performance of the firm as it ensures that knowledge management resources are availed to the firm.

Alaarj and Mohamed (2017) conducted a study that examines the impact of knowledge management capacity on the performance of the service sector in Malaysia. The study used a mixed research design. The purposive sampling technique was adopted by 153 respondents selected from senior executive top-level management of the public listed service-providing companies in Malaysia. Partial Least Square was further employed to analyse data. The findings indicated a significant relationship between knowledge management resources and performance. The study recommended that an organization's management needs to link knowledge management capacity with the key performance indicators. The current study adopted an ordinary least square methodology that provided multiple regression models for examining variables' relationships.

Deng, Chao and Bai (2014) assessed the knowledge management approach to support collaborative innovation community capability building. Collaborative innovation is the multi-disciplinary perspective of community and knowledge management capacity building. The study conducted a desk review of the literature associated with collaborative knowledge management and innovation. The results revealed that knowledge management had a role in supporting collaborative innovation community capacity building through converging knowledge

management, using knowledge activities for synergy in communication and knowledge artefacts reconfiguring to integrate knowledge management activities.

The convergence of knowledge management enables trust-building collaboration, communication and integration of building connectivity. The current study examined knowledge management capacity building instead of knowledge management in developing collaborative innovation community capacity building.

Patwary *et al.* (2023) examined knowledge management practices, organization commitment and capacity building on employee performance in Malaysian hotel industry. This study aims to investigate the impact of organisational commitment, capacity building, and knowledge management practises on employee performance in the hospitality sector. This study also looked into how organisational commitment and capacity building affected the relationship between knowledge management practises and worker performance. Data from Malaysian hotel employees was gathered using a quantitative strategy and a questionnaire survey. The study used 291 participants completed self-administered questionnaires to gather data, and partial least squares structural equation modelling was used to examine the hypotheses. The findings of this study demonstrate that knowledge-employee performance is favourably and significantly influenced by knowledge management practises. Employees attain this performance thanks to the organisational commitment and capacity-building culture's mediating influence. The current study focused on productivity in Kenya's Sugar industry in relation to knowledge management capacity building.

Harper and Dickson (2019) investigated capacity building for knowledge management mobilisation in health and social care by using evaluation principles. The impact was evaluated using surveys, focused groups discussions, and structured interviews. Results showed that evidence for change benefited people, teams,

organisations, and local communities by helping them change and learn from evidence-informed practises. According to the report's findings, evidence for change's incorporation of developmental evaluation principles was crucial in creating a creative capacity-building framework for successful knowledge mobilisation in the health and social care sectors. The current study focused on the relationship between knowledge management capacity building and productivity where innovation capacity building is an independent variable just as knowledge management capacity building.

In Indian organisations, the effects of knowledge management competencies on knowledge management effectiveness were studied by Bharadwaj, Chauhan and Raman (2015). This research paper aimed to examine knowledge management capabilities and their effects on knowledge effectiveness in major Indian organisations. The capacities of knowledge management were examined in relation to infrastructure, structure, and culture. The four main steps of knowledge management are creation, acquisition, storage, and application. Structural equation modelling was used to analyse data gathered from 156 organisations. The findings showed that knowledge management effectiveness may increase by utilizing process and infrastructure capabilities. The current study focused on the relationship between knowledge management capacity building and organization productivity in the sugar industry in Kenya.

Summary of Literature Review

Extant literature on knowledge management capacity building were examined on performance (Alaarj & Mohamed, 2017), employee performance (Patwary, *et al.*, 2023) and collaborative innovation community capability building (Deng, Chao & Bai, 2014). Knowledge management and performance of the service sector was investigated by Alaarj and Mohamed (2017) using partial least square modelling. The current study adopted ordinary least square techniques where regression analysis was used. Deng, Chao and Bai (2014) used a desk review of

literature to examine knowledge management in collaborative innovative community development. The current study used primary data to examine knowledge management on productivity of sugar companies. Patwary *et al.* (2023) focused on knowledge management practices in relation to employee performance where organization commitment and capacity building culture were the mediating variables.

The current study examined knowledge management capacity building and productivity where transformative leadership was the moderating variable. Another study has contextual gap where the study by Harper and Dickson (2019) focused on health and social care knowledge mobilisation using innovative capacity building model. The current study examined knowledge management capacity building in relation to organization productivity where innovation capacity building an independent variable as the knowledge management capacity building. A study by Bharadwaj, Chauhan and Raman (2015) on knowledge management capabilities focused more on knowledge management effectiveness among Indian organizations, hence, creating conceptual gap in its effectiveness on productivity. The current study addressed the conceptual gap by examining the relationship between knowledge management capacity building and productivity of sugar companies.

METHODOLOGY

This study adopted a positivist research philosophy which utilized correlational research design to assess the relationship between the dependent and independent variables. Sugar companies in Kenya are primarily located in the western and coastal regions of the country. The study was limited to all eight out of 10 public sugar companies that are working since Nyanza and Mumias sugar companies closed at the time of study due to indebtedness to farmers and creditors. The public sugar companies were targeted due their declining productivity of sugar from 2015. Using census survey questionnaires were administered to all the target population of

218 managers in 8 sugar companies from the Western and Nyanza regions of Kenya. Knowledge management capacity building was measured using 5-point Likert scale which adopted the following indicators; knowledge sharing, knowledge creation and knowledge acquisition. Similarly, 5-Point Likert scales was used to measure productivity of sugar in terms of employee productivity, quantity of sugar, quality of sugar and efficiency production of sugar in the factory.

The supervisors and experts examined content and construct validity The supervisors and experts examined content and construct validity to check if the appropriated content is captured by the questionnaire. Finally, face validity indicates the extent to which results seem valid from their face value. This study enhanced validity through an extensive literature review and consultation with the subject experts and lecturers in Human Resource Department. In this study, 10% (22) of respondents from sugar firms not covered in this study was used for the pilot study. The internal consistency of the obtained data was examined using the Statistical Package for Social Sciences (SPSS).

Data was analysed using descriptive statistics such as frequencies, means, and standard deviation to describe the knowledge management capacity building and firm productivity. Simple linear regression model was adopted in testing the study's hypothesis. This was represented in Model 1 as follows;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon \quad \text{Model 1}$$

Where; Y=Productivity of sugar companies, X_1 = Knowledge Management Capacity Building, β_1 , represent the regression coefficients and ε = Error Term.

RESULTS AND DISCUSSIONS

Knowledge management capacity building was examined using percentage frequency, mean, and standard deviation. This was used to understand the rate of agreeability to knowledge management

and capacity building concepts in the sugar industry. The results are presented in *Table 1*.

Table 1 revealed that there were 75.8% of sugar firms developed sufficient infrastructure to retrieve, store, and acquire knowledge which was thrice more than 24.2% which didn't develop. This was confirmed by mean of 3.211 which revealed that the sugar firms have sufficient infrastructure for knowledge management. The variation across the sugar companies was low on knowledge management infrastructure (standard deviation of 0.809). There was slightly 36.6% of sugar firms who were more than 12.4% which did not empower their employee to improve creativity. Furthermore, a mean of 3.253 revealed the sugar companies promoted creativity, leading to the creation of new knowledge in the firm. The sugar firms had low variation in creativity among employees as revealed by standard deviation of 0.678 showed that a slight. A total of 79.4% sugar companies as oppose to 9.8% which did not enable knowledge sharing in the firm to enable high-skilled labour to be maintained. The mean of 3.768 revealed that knowledge sharing was crucial in maintaining knowledge in high-skilled labor. This had low variation across the sugar firms as indicated by a standard deviation of 0.72184. Deng, Chao and Bai (2014) added that convergence of knowledge management assisted in sharing knowledge through resulting to trust-building collaboration, communication and building connectivity.

The findings *Table 1* further revealed that 42.3% of the sugar companies did not reward creative ideas and new knowledge as compared to 12.4% who rewarded their employees. This indicated that the sugar firms did not reward creative ideas and new knowledge as revealed by sample mean of 2.701. There was low variation on reward for new ideas and knowledge as indicated by standard deviation of 0.678. Similarly, there were 36.1% sugar companies who did not have knowledge management system for stores and manages knowledge activities as comparison with 21.6% who had. A mean of 2.856 revealed few firms had knowledge management systems for storing and

managing knowledge activities. The variation across the firms on knowledge management system was low with standard deviation of 0.748. Further results showed that there was slightly more firms 35.6% who provided their employees with source of knowledge than 14.4% who were not. A mean of 3.211 showed that employees were encouraged to acquire knowledge, which had low variation across the sugar companies as indicated by a standard deviation of 0.677. This reveals that knowledge sources were available to a few firms that assisted in knowledge acquisition. Finally, the findings showed that 64.6% of respondents were neutral on whether the firms had improved or not the knowledge management capacity building through different knowledge activities. There were slightly more sugar companies with improved knowledge (30.4%) than those without (5.2%). The mean of 3.253 and standard deviation of 0.542 show that knowledge management capacity building was slightly practiced by sugar firms.

Table 1: Knowledge management capacity building descriptive results

Questions	5 (SA)	4 (A)	3 (N)	2 (D)	1 (SD)	Mean	STD
The firms have developed sufficient infrastructure that can retrieve, store, and acquire knowledge.	0(0.0%)	88(45.4%)	59(30.4%)	47(24.2%)	0(0.0%)	3.211	.809
The employees are well empowered to improve creativity leading to the creation of new knowledge in the firm.	2(1.0%)	69(35.6%)	99(51.0%)	34(12.4%)	0(0.0%)	3.253	.678
Knowledge is shared in the firm to enable high skills labour to be maintained.	14(7.2%)	140(72.2%)	21(10.8%)	19(9.8%)	0(0.0%)	3.768	.722
The sugar industry rewards ideas and new knowledge creation to improve the firm's productivity.	0(0.0%)	24(12.4%)	88(45.4%)	82(42.3%)	0(0.0%)	2.701	.678
The firm has a knowledge management system that stores and manages knowledge activities.	0(0.0%)	42(21.6%)	82(42.3%)	70(36.1%)	0(0.0%)	2.856	.748
Employees are provided with an appropriate source of knowledge that encourages the acquisition of knowledge.	0(0.0%)	69(35.6%)	97(50.0%)	28(14.4%)	0(0.0%)	3.211	.677
The firm has improved knowledge management capacity building through different knowledge activities.	0(0.0%)	59(30.4%)	125(64.4%)	10(5.2%)	0(0.0%)	3.253	.542
<i>Key: 1 = Strongly Disagree (DS), 2= Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA), STD = Standard Deviation</i>							

The productivity of the sugar companies was examined, and the descriptive results, that is, percentage frequency, mean, and standard

deviation, were adopted. The findings are presented in *Table 2*.

Table 2: Production of Sugar Companies Descriptive Results

Questions	5 (SA)	4 (A)	3 (N)	2 (D)	1 (SD)	Mean	STD
The production of sugar has improved in terms of yields over years.	33 (17.0)	107 (55.2)	44 (22.7)	10 (5.2)	0 (0.0)	3.840	.762
Employee productivity in terms of yields per employee has increased in the firm.	0 (0.0)	115 (59.3)	48 (24.7)	31 (16.0)	0 (0.0)	3.433	.754
The sugar product quality has improved in the firm.	32 (16.5)	78 (40.2)	53 (27.3)	31 (16.0)	0 (0.0)	3.572	.948
There is improvement in variety of sugar products in the firms.	23 (11.9)	35 (18.0)	106 (54.6)	30 (15.5)	0 (0.0)	3.262	.863
The rate of production has improved due to the efficiency of the employees.	8 (4.1)	112 (57.7)	56 (28.9)	18 (9.3)	0 (0.0)	3.567	.718

Key: 1 = Strongly Disagree (DS), 2= Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA), STD = Standard Deviation.

The results in *Table 2* revealed that 72.2% of the sugar companies improved production of sugar in terms of yields as compared with other years as oppose to 5.2% who did not. The mean of 3.840 revealed that most of the sugar firms registered significant improvement in terms of yields as compared to those who did not. The variation in yield of sugar was low among the sugar companies as indicated by standard deviation of 0.762. Similarly, Employee productivity had increase in terms of yield per employee in 59.3% sugar companies as compared to 16.0% sugar companies who did not register increment in employee productivity. A mean of 3.433 revealed that firms that had improved in employee production were slightly higher than those with no improvement. The variation in employee performance was low across the sugar companies as indicated by standard deviation of 0.754.

Findings further revealed that the quality of sugar had improved in 56.7% of the sugar companies however, 16.0% of the companies registered did not register improvement in sugar quality. Therefore, the sugar companies had considerable improvement in quality as revealed by mean of

3.572, however a slightly higher variation across the sugar companies on sugar quality produced (standard deviation of 0.948). Further analysis showed that 61.8% of the sugar companies have improve sugar variety product as oppose to 15.5% who did not improve. There were slightly more firms that had different varieties of sugar products as compared to those that produced one product (mean of 3.262). The variation across the sugar firms was slightly high in terms of varieties planted (standard deviation of 0.863). Concerning the rate of production, 62.8% of the sugar companies improved due to the efficiency of their employees where 9.3% did not. However, a few firms did not improve their employees' efficiency, as indicated by a mean of 3.567. The variation is low among the sugar firms as indicated by a standard deviation of 0.718.

In order to examine the relationship between knowledge management capacity building and productivity of sugar companies in Kenya, a model summary and coefficient tablets were adopted. The results were tested using 5% significance level for the ANOVA and statistics as presented in *Table 3* and *4*.

Table 3: Knowledge management capacity building summary model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R ² Change	F Change	df1	df2	Sig. F Change
1	.843 ^a	.711	.709	.31237	.711	471.503	1	192	.000

a. Predictors: (Constant), KMCB

According to the summary model results, knowledge management capacity building had strong positive significant relationship with organizational productivity ($R=0.843$, $P=0.000<0.05$). The contribution of knowledge management capacity building is 71.1% of total variation in productivity of the organization (r -

square =0.711). On the contrary, 28.9% of the organization's productivity variation was associated with other factors. Therefore, organization should adopt knowledge management capacity building in order to hence their performance.

Table 4: Knowledge management capacity building coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.224	.175		-1.281	.202
	KMCB	1.182	.054	.843	21.714	.000

a. Dependent Variable: OP

Knowledge management capacity building had a significant positive relationship with productivity ($\beta_2 = 1.182$, $P = 0.000<0.05$). The null hypothesis is rejected. This implied that a unit increase in knowledge management capacity building had 1.182 unit increase in organizational productivity. The alternative hypothesis was accepted, which implied that there was a statistically significant relationship between knowledge management capacity building and the productivity of sugar companies in Kenya. This implies that sugar companies that practiced knowledge management capacity building increase their productivity as opposed to those who did not improve knowledge management capacity building. It was evident that there were few firms that did not practiced knowledge management capacity building based on the results this companies registered low performance based on the simple linear regression model. Hence there existed nexus between knowledge management capacity building and the productivity of sugar companies.

Similarly, knowledge management capacity had significant impact on performance of firms in Malaysia as found by Alaarj and Mohamed (2017). The study used partial least square which

focused while the current study utilized ordinary least square to examined knowledge management capacity and productivity. This study pointed out knowledge sharing as the leading variable on productivity of the firms.

The results also pointed out that the sugar firms had poor reward system for new knowledge and knowledge management system, despite, knowledge management practices being significant in productivity of sugar firms under investigation. The sugar firms should improve in knowledge retrieve, store, and acquire, improve creativity and knowledge acquisition.

Knowledge management practices through capacity building culture enhanced employee performance as found by Patwary, *et al.*, (2023). The results concur with this study that knowledge management capacity building had a significant impact on productivity where employee productivity is one aspect of productivity.

CONCLUSION AND RECOMMENDATIONS

Summary

According to the results, a few firms had developed sufficient infrastructure for retrieving, storing, and acquiring knowledge. The results revealed that more than half of the sugar firms empowered their employees to be creative, creating new knowledge. Knowledge sharing in the majority of the firms contributed to high skills in the labour force.

On the contrary, most of the sugar firms did not reward new ideas and knowledge, negatively affecting knowledge creation. Similarly, these firms did not invest in a knowledge management system that could store and manage knowledge activities. This implies that the sugar firms need to improve their reward systems as well as their knowledge management systems to manage and utilize existing knowledge for higher productivity.

In more than half the firms, the employees were provided with appropriate sources of knowledge that improved knowledge acquisition. These firms had improved knowledge management capacity through different knowledge activities. Knowledge management capacity building is not well developed in the sugar industry, resulting in poor acquisition and storage, although the employees have tried to share existing knowledge.

The null hypothesis was then rejected and an alternative hypothesis adopted ($P < 0.05$). Therefore, a statistically significant relationship existed between knowledge management capacity building and organizational productivity.

Conclusion

The study concludes that knowledge management capacity building had a positive and significant relationship with productivity of sugar firms in Kenya. Knowledge sharing was rated the highest knowledge management capacity-building practice. Slightly more firms had developed infrastructure for knowledge management that could store, retrieve, and acquire knowledge than those who did not. The employees were

empowered to improve on existing creativity as well as provided with appropriate sources of knowledge. However, the sugar industry had challenges with its knowledge management system and a poor reward system that would enable the creation of new knowledge.

Recommendations

The study recommends that there is a need to improve the knowledge management system and policies. The knowledge management policies will enable the sugar industry to develop a rewarding system for knowledge and innovation creation. Additionally, knowledge management system was found to enable the organization to create, acquire, and retrieve knowledge effectively and efficiently, knowledge management has the highest impact on productivity.

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