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## **Knowledge creation and performance of Deposit-Taking SACCOs in Nyeri County, Kenya**

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### **ABSTRACT**

*In order to DT-SACCOs to remain competitive in the environment characterized by uncertainty and changes, knowledge creation and proper management are paramount. The current study, therefore, sought to determine the effect of knowledge creation on performance of deposit-taking SACCOs in Nyeri County Kenya. This study applied a descriptive research design. The researcher focused on 11 licensed DT-SACCOs operating in Nyeri County. The respondents of the study were 110 management staff in the human resource, credit, ICT, marketing, finance. The study adopted census on all the 110 employees from the DT-SACCOs. Questionnaires were used in collection of primary data. Descriptive analysis and chi-square analysis were conducted with the help of SPSS. The study found that SACCOs differed significantly in knowledge creation. Chi-square analysis showed that that knowledge creation ( $p=0.00$ ) was statistically significant. It was concluded that knowledge creation positively enhanced SACCO performance. The study recommends that the deposit taking SACCOs need to come up with more ways of creating knowledge by empowering its staff to be innovative and creative.*

**Key Words:** Knowledge, Knowledge management, Knowledge creation, Organizational performance and SACCOs

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### **I. Introduction**

Organizational performance is a comparison between inputs and outputs (Payal et al., 2019). Organizational performance is the attainment of standards as compared to a set or predetermined standard. Organizational performance is defined in terms of attainment of targets within a specified time. According to Cull et al. (2014), organizational performance reflects the overall productivity of members within an enterprise. An organization can determine its performance either using financial or non-financial measures. One way through which organizations enhance their performance is by knowledge management (KM). Knowledge management describes the strategies that organizations embrace to identify, create, share and utilize information to enhance performance. KM according to Devi Ramachandran et al. (2013) is the approach of management that helps firms to create, share, preserve

and effectively apply wide knowledge that is placed in the organization for better performance. KM occurs when an organization acquires and develops its core competencies to gain competitive advantage and thus performance. Similarly, according to [Jayasingam et al. \(2013\)](#), KM is a process through which organizations create distinctive competencies. KM deals with both information as well as knowledge. KM is also defined as the ability of the organization to deliberately and systematically coordinate the structures, technologies and people within an organization for value addition through innovation and reuse ([Delen et al., 2013](#)).

Knowledge management involves sharing of information that is of value within an organization, creating and archiving specialized information and insight both across communities and within communities in the organization with similar needs ([Donate and Pablo, 2015](#)). According to [Zheng et al. \(2010\)](#), KM involves the process of developing tools, techniques, methods and values within the organization which enhances knowledge flow from an individual to another in an organization, the retrieval and also in the processing and use of this knowledge to enhance innovations and improve processes and products. According to [Kim et al. \(2014\)](#), knowledge management practices is the process through which we create links between information that is contained within the firm and the outside the firm which will be able to reach the appropriate people at the right time and integrating an opportunity to the organization to align the operation with ever-changing and dynamic business environment. For an organization to be efficient and effective, it requires knowledge to improve performance ([Choudhary et al., 2013](#)). Knowledge management practices describe ways in which organizations transform ideas into actions to attain given specific goals. [Al-Bahussin and El-Garaihy \(2013\)](#) defined KM practices as the ability to understand how knowledge is generated, shared, organized, stored, applied, shared and protected in an organization. This study focuses on knowledge creation.

According to [Nonaka and Toyama \(2015\)](#), knowledge creation alludes to the ceaseless blend, move, and change of various types of information. This happens as clients cooperate, rehearse and learn. Set forth plainly; it is the making of thoughts, which is at the core of an organization's upper hand. The upper hand is the thing that an organization has when it has the edge over its adversaries, explicitly when it has the edge with respect to the arrangement of a specific item or administration ([Barney and Hesterly, 2009](#)). Knowledge creation is the development of new thoughts and ideas. This happens through associations among unequivocal and inferred information in individuals' psyches ([Nonaka et al., 2006](#)). There are two types of knowledge creation. Explicit knowledge is the data that is accessible and simple to discover. Clients can work together with respect to the worth and utilization of this kind of express information. Implicit knowledge on the other hand exists in individuals' brains. It isn't accessible like unequivocal information is. It is additionally difficult to impart to someone else orally or recorded as a hard copy ([Choi and Lee, 2002](#)). Knowledge protection on the other hand entails the means and attempts by a firm to process, store, patent and keep it safe from misuse and plagiarism. Knowledge creation occurs when both the external and internal resources of the company are used for the production of new knowledge to attain the set goals. Organizations can create knowledge through brainstorming sessions and carrying out research ([Ragab and Arisha, 2013](#)).

Savings and Credit Cooperatives are firms in the financial sector that help in mobilization of financial resources by encouraging a saving culture among people. SACCOs are mutually owned by members with common and shared interests ([Buluma et al., 2017](#)). The ownership of the SACCOs by members is done on a democratic basis. In Kenya, SACCOs are divided into deposit taking (DT) and non-deposit taking ones. Unlike non deposit takings SACCOs, DT-SACCOs readily accept deposits from customers. DT-SACCOs in Kenya are closely regulated by the SACCO Societies Regulatory Authority (SASRA) ([Masika and Simiyu, 2019](#)). On the other hand, non-deposit taking SACCOs are closely regulated by the Co-operative societies Act of 2008. As of December 2017, there were 164 registered DT-SACCOs ([SASRA, 2017](#)). Out of these SACCOs, there are those operating within Nyeri County among other areas.

Deposit taking SACCOs faces unique challenges including the ever changing regulatory environment, increased demand from customers for quality services and rapid changes in technology ([Masika and Simiyu, 2019](#)). To DT-SACCOs to remain competitive in the environment characterized by uncertainty and changes, knowledge management is paramount. [Chong et al. \(2013\)](#) note that only DT-SACCOs that have implemented effective KM practices can remain competitive and perform in an environment that is characterized by uncertainty. According to [Choudhary et al. \(2013\)](#), DT-SACCOs are faced with stiff competition from other firms including commercial banks and thus require to effectively manage

knowledge capabilities for better performance. It is against this backbone that the current study sought to determine how KM practices can influence performance SACCOS in the Kenyan context with specific references to Nyeri County DT-SACCOS.

In spite of the important role of DT-SACCOS in the economy of the country, these organizations are faced with various challenges including inadequate knowledge on KM capabilities (Gichuhi, 2017). This has adversely affected their performance for instance; there was a general reduction in growth of asset base, gross loans and total deposits for DT-SACCOS in Kenya that stood at 12.4%, 11.3% and 12% for 2017 as compared to 14.8%, 15.3% and 14.8% for 2016 respectively (SASRA, 2017). SACCOS were found to have poor data and information collection, creation, storage, dissemination and value addition which led to loss of data and funds to unauthorized entities. Available studies have focused in different contexts away from the SACCO subsector hence creating contextual gaps. Among studies conducted in SACCOS, relationship between knowledge creation and performance was not conducted creating a knowledge gap. To fill this gap, the current study sought to determine the effect of knowledge creation on performance of deposit-taking SACCOs in Nyeri County Kenya. The following hypothesis guided the study: There is no significant effect of knowledge creation on performance of deposit-taking SACCOs in Nyeri County Kenya.

## II. Materials and Methods

This study applied descriptive research design. This design was employed to obtain an accurate profile of people, events and situations. It aided in gathering firsthand data from the respondents to formulate rational and sound conclusions and recommendations. This design was employed to determine the interaction between KM practices and performance of DT-SACCOS regarding Nyeri County. The researcher focused on 11 licensed DT-SACCOS operating in Nyeri County (SASRA, 2018). The study targeted management staff in human resource, credit, ICT, marketing, finance. The study adopted a census on all the 110 employees from the DT-SACCOS. The sample size of the study was therefore 110 management staff from the DT-SACCOS in Nyeri County (Table 01).

**Table 01. Study Population**

Department	Per Sacco	Population	Percentage
Human Resource Department	1	11	10
Savings and Credit Department	2	22	20
ICT department	1	11	10
Marketing Department	3	33	30
Finance and Accounting Department	3	33	30
Total	10	110	100

The researcher collected primary data. Questionnaires were used in collection of primary data. The questionnaires were semi-structured and divided into sections based on study objectives. Data were collected between March and July, 2019. The face validity was established by presenting the questionnaire for scrutiny and evaluation by the supervisor for the appearance to be checked in terms of consistency of style feasibility reality of the language used and formatting of the entire document. The face validity was established by presenting the questionnaire for scrutiny and evaluation by the supervisor. The researcher relied on internal measure of consistency called Cronbach Alpha to determine reliability of the instruments (Cronbach, 1951). In this case, the researcher pre-tested the reliability of the questionnaires by purposively selecting 10 employees from Kenya Women Microfinance Bank. A coefficient of 0.7 and above was accepted as a good measure for reliability.

Once data was collected, it was entered in Statistical Package for Social Sciences (SPSS). Descriptive analysis was used to analyse quantitative data. This comprises of frequencies, percentages, mean and standard deviation. Qualitative data were subjected to content analysis and then analyzed using descriptive statistics. To establish the effect of knowledge management practices on performance of deposit-taking SACCOS, chi-square analysis was employed.

### III. Results

Out of the 110 respondents sampled for the study, 100 of them completed the questionnaires and presented them for analysis. This represents a response rate of 90.91%. This rate is statistically significant and representative according to [Mugenda and Mugenda \(2003\)](#) who indicated that the response rate of half is sufficient for investigations and revealing, a 60% rate is by and large great while a 70% rate of response is magnificent.

#### Demographic Characteristics of Respondents

It was established that 75% of the management staff among the DT SACCOs in Nyeri County were male while 25% were female. This indicates that most of the staff among the SACCO are male hence no gender balance. This could be attributed to the nature of governance of organizations in Kenya which are male dominated. The study established that 15% of the respondents were diploma holders, 65% were undergraduates while 20% had postgraduate qualifications. This indicates that majority of the respondents were undergraduate degree holders. The high level of education among respondents was expected as the participants in the study were all management staff which requires post-secondary education. This shows that the respondents were highly educated meaning they could understand the questions posed to them and respond appropriately. Findings in [Table 02](#) show that 39% of the respondents had a working experience of between 7 and 9 years while 28% had a working experience of 4-6 years and 10% of the respondents had working experience of over 10 years. This, therefore, shows that there was a high working experience among respondents. The high working experience was an advantage in the study as it meant that the bulk of respondents were experienced enough to provide reliable information. Respondents in the study were able to be resourceful on knowledge management owing to their vast experience in the SACCO.

**Table 02. Demographic Characteristics of Respondents**

Characteristics	Category	Frequency (N=100)	Percent (%)
Gender	Male	75	75
	Female	25	25
Education	Diploma	15	15
	Undergraduate	65	65
	Post Graduate	20	20
Working Experience	< 3 years	11	11
	4-6	28	28
	7-9	39	39
	>10	22	22

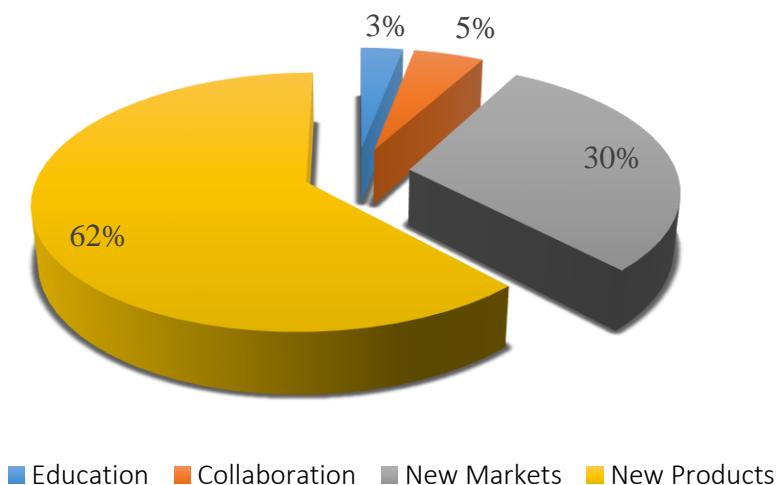
#### Knowledge creation among SACCOs

The study respondents agreed to a moderate extent that new ideas and skills are developed through SACCOs research work ( $M=3.34$ ,  $SD=0.644$ ). Majority of the respondents disagreed that the SACCOs conduct regular research to develop existing ideas and skills ( $M=2.89$ ,  $SD=0.716$ ). The study respondents disagreed to a moderate extent that their SACCO encourages employees to create knowledge in their daily activities ( $M=3.61$ ,  $SD=0.866$ ). The study respondents agreed to a moderate extent that departmental heads in their SACCO are responsible for creating new information ( $M=3.88$ ,  $SD=0.821$ ). The respondents also agreed to a moderate extent that brainstorming helps staff in their SACCO to solve complex issues affecting performance ( $M= 3.56$ ,  $SD=0.771$ ). There was a high disagreement among respondents that their SACCO conducts regular benchmarking programs to borrow and share existing ideas and skills ( $M=2.61$ ,  $SD=0.801$ ). The average mean of 3.315 indicates a moderate application of knowledge creation in participating in the study. The standard deviation of 0.7698 depicts a divergence of views which indicates that SACCOs differed significantly in knowledge creation ([Table 03](#)).

**Table 03. Knowledge creation and SACCO performance**

Statement	Mean	Std. Dev
New ideas and skills are developed through SACCOs research work	3.34	0.644
The SACCO conducts regular research to develop existing ideas and skills	2.89	0.716
Our SACCO encourage employees to create knowledge in their daily activities	3.61	0.866
Departmental heads in our SACCO are responsible for creating new information	3.88	0.821
Brainstorming helps staff in our SACCO to solve complex issues affecting performance	3.56	0.771
The SACCO conducts regular benchmarking programs to borrow and share existing ideas and skills	2.61	0.801
Average	3.315	0.7698

The respondents in the study were asked to indicate how their organizations created new knowledge. Majority (62%) of the respondents indicated new products while 30% indicated new markets as ways in which their SACCOs created new knowledge. By enhancing the fit between new product features and customer preferences, the SACCOs can create new knowledge. This finding is consistent with results of a survey by [Ringen et al. \(2016\)](#) which discovered that organizations have presented and actualized various activities to improve authoritative learning and information structures in item advancement and development cycles to increase the upper hand.

**Figure 01. Creation of New Knowledge**

#### Organizational performance of SACCOs

The study respondents to a moderate extent agreed that the innovation level of the SACCOs has increased due to knowledge management and that the SACCOs market share has grown due to employment of knowledge management as indicated by a mean of 3.29 and 3.06 respectively with a standard deviation of 0.719 and 1.341 respectively. The respondents further agreed that innovation has enabled the SACCO to achieve competitive advantage and knowledge management has improved quality of service delivery as indicated by a mean of 3.59 and 3.51 respectively while the standard deviation was 0.902 and 0.811 respectively ([Table 04](#)). This indicates that to a significant extent, knowledge management has contributed positively to the performance of the SACCOs through improved innovation, competitive advantage, market share growth and quality of service delivery. The standard deviations were high indicating that the SACCOs significantly differed on the performance indicators used in the study.

**Table 04. Organizational performance of SACCOs**

Statement	Mn	Std. Dev
The innovation level of the SACCO has increased due to knowledge management	3.29	0.719
Innovation has enabled the SACCO to achieve competitive advantage	3.59	0.902
The SACCO market share has grown due to employment of knowledge management	3.06	1.341
Knowledge management has improved quality of service delivery	3.51	0.811
Average	3.363	0.9433

### **Effect of Knowledge Creation on Performance of SACCOs**

Results in [Table 05](#) show that knowledge creation ( $p=0.00$ ) was statistically significant. The hypothesis of the study is therefore rejected and the study concludes that there is a significant effect of knowledge creation on performance of deposit-taking SACCOs in Nyeri County Kenya.

**Table 05. Effect of Knowledge Creation on Performance of SACCOs**

	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	17.303a	2	.000
Likelihood Ratio	18.491	2	.000
Linear-by-Linear Association	13.655	1	.000
N of Valid Cases	92		

## **IV. Discussion**

The study sought to find out the effect of knowledge creation on performance of deposit-taking SACCOs in Nyeri County, Kenya. The study established that to a moderate extent new ideas and skills are developed through SACCOs research work, the SACCOs conduct regular research to develop existing ideas and skills and also conduct regular benchmarking programs to borrow and share existing ideas and skills. The respondents significantly agreed that their SACCOs encourage employees to create knowledge in their daily activities. Departmental heads in the SACCOs are responsible for creating new information and that brainstorming helps staff among the SACCOs to solve complex issues affecting performance. The study indicated that mentorship, exchange programs, capacity building through career advancement contributed to creation of new knowledge.

This results is in agreement with the findings of [Abdullah and Mulhim \(2017\)](#) which revealed that organizations have significantly recognized knowledge creation as the most important asset for attainment of competitive advantage and thus performance. It was shown that organizations strived to be innovative through information sharing which is critical as far as performance is concerned. The finding also agrees with [Cheewanan and Vichita \(2017\)](#) who found that the knowledge creation capabilities and processes of an organization are largely influenced by the prevailing culture and nature of the industry from which an organization operates from. The finding also agrees with a study by [Gholami et al. \(2013\)](#) who carried out an analysis on the effect of knowledge management and performance of small and medium-sized enterprises in Iran and indicated acquisition, storage, creation, sharing and implementation of knowledge in an organization have a significant influence on performance of employees in an organization. From the study, it was established that the KM practices have direct impact on performance of the small and medium-sized enterprises. The study indicated that mentorship, exchange programs, capacity building through career advancement all contributed to creation of new knowledge.

Chi-square tests showed that knowledge protection ( $p=0.000$ ) was statistically significant. The study finding is in agreement with the resource based view theory which theory argues that firms rely on resources and other internal capabilities to create value and thus performance. The theory sees knowledge as one of the most critical resources that firms use to outperform competitors. This finding is in tandem with the findings of [Grimm and Anderl \(2013\)](#) established that knowledge protection ensured that only authorized individuals were able to access information in an organization. The finding is however in conflict with the findings of [Wei et al. \(2018\)](#) who indicated that protection of knowledge resulted in reduced quality in partnership and performance of projects.

## **V. Conclusion**

The study concluded that to a significant extent the SACCOs embraced knowledge creation through new ideas and skill development, improvement of existing ideas, research, brainstorming and benchmarking. Knowledge creation positively enhanced SACCO performance. By using knowledge creation processes employees create new ideas by combining current knowledge. Knowledge creation modes enhance SACCOs to create new products while utilizing their new knowledge to enhance performance.

This study has important managerial implications derived from the findings. First of all, SACCO managers and ICT managers have to continuously examine their knowledge base. The study recommends that the deposit taking SACCOs need to come up with more ways of creating knowledge by empowering its staff to be innovative and creative. This can be done by conducting regular research to develop existing ideas and skills. The SACCOs can facilitate the employees who come up with new ideas as this will encourage more ideas and skills to be innovated. Knowledge can also be created through social interactions between employees or through the use of knowledge codified and shared through knowledge management.

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