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The Influence of Collaboration Capability on Strategy Execution in Deposit Taking Savings and Credit Co-operative Organisations in Kenya

Lucy N. Kiruthu, Juliana M. Namada and Peter N. Kiriri

Collaboration both internal and external is considered a dynamic capability that depicts how people work together to achieve desired results. The purpose of this paper is to evaluate the influence of collaboration capability on strategy execution in Deposit Taking Savings and Credit Co-operative Organisations (DT-SACCOs) in Kenya. The study population was the 500 heads of departments in Kenya's 164 DT-SACCOs fully licensed in 2017. From the 222 heads of departments sampled and surveyed through a questionnaire, 183 complete responses were received. The main analytical framework used for hypotheses testing was the structural equation modelling. The study found that collaboration capability both internal and external has a significant positive influence on strategy execution. This study adds to the existing body of knowledge on the influence of collaboration capability on strategy execution. Further, the study presents practitioners in strategic management, policy makers, and the leadership in co-operatives with recommendations to improve practice.

Introduction

Collaboration is considered as an organisational capability that drives strategic success (Allred et al., 2011; Roghé et al., 2012). As a behavioural factor, collaboration depicts a high level of interdependence and is at the centre of cross-functional efforts (Ashkenas, 2015; Logsdon, 1991). As a capability, collaboration is embedded in the organisational culture and can hasten strategic change (Alpander & Lee, 1995; Ke & Wei, 2008).

Strategy execution is a complex endeavour that requires individuals, teams, departments, and even organisations to think and to act together. However, in many organisations, a major impediment exists as numerous good strategies fail during execution (Leinwand et al., 2015; Raffoni, 2008). This failure is despite the prominence of strategic management in the last three decades. It is argued that collaboration has the ability to build the consensus needed during execution and thus reduce the time it takes to get things done (Whitney, 2013). This is only possible if there is effective collaboration at all levels of an organisation. The collaboration capability-strategy execution linkage is a novel area of study requiring more investigation.

By their very nature, savings and credit co-operative organisations (SACCOs), as co-operatives, have co-operation at the centre of their existence (Taylor, 2009). Co-operation among co-operatives is one of the seven principles of the co-operative movement. Therefore, SACCOs have an added advantage that other financial institutions may lack, that of the co-operative spirit. However, SACCOs have not utilised this principle and other values to full potential. In Kenya, Deposit Taking SACCOs (DT-SACCOs) are the backbone of the SACCO movement controlling more than 75% of the sector's assets and deposits and 82% of the membership (Sacco Societies Regulatory Authority [SASRA], 2014). These DT-SACCOs have contributed extensively to Kenya's social-economic development. In spite of this, there are limited studies that focus on the SACCO sector. Globally, the SACCO sector has been identified as an abandoned area of scholarly research (McKillop & Wilson, 2010).

Further, past studies are limited in their ability to make substantive conclusions on the linkage between collaboration capability and strategy execution in DT-SACCOs in Kenya. In the USA context for example, Taylor (2009), in a study focusing on external collaboration among SACCOs, presents a strong case for collaboration and identifies the need to link collaboration

efforts to the overall strategic direction. In Kenya, a study by Moturi and Mbiwa (2015) links the execution gap during implementation of information management systems in SACCOs to poor internal collaboration. However, strategy execution goes beyond implementation of new systems and the study does not sufficiently guide scholars, policy makers, and practitioners in establishing how collaboration capability influences overall strategy execution. Studies to the contrary emanate from other sectors. A study by Dooley et al. (2000) targeting hospitals in the USA points out that collaboration may not be very important because pushing for decision commitment as part of collaborative efforts slows down the implementation speed. Other than the influence of collaboration demonstrated by Moturi and Mbiwa (2015) in implementation of new systems, the influence of collaboration capability on the execution of the overall corporate strategy has not been adequately investigated in previous studies. The linkage between collaboration capability and strategy execution in SACCOs therefore requires further investigation. This study sought to extend the existing body of knowledge by examining the influence of collaboration capability on strategy execution in the Deposit Taking SACCOs in Kenya.

Literature Review

Collaboration capability

Collaboration is considered a dynamic organisational capability that well-managed companies tend to have (Ulrich & Smallwood, 2004). Gray (1989) describes collaboration as a process "through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible" (p. 5). Blomqvist and Levy (2006) expound on this by stating that collaboration is the ability to build and manage network relationships based on trust. Further, Rosen (2007) simply defines collaboration as people working together to create value while sharing a space that is either virtual or physical. As a dynamic capability, collaboration is described as the ability for people to work across organisational boundaries to achieve desired goals (Ulrich & Smallwood, 2004; Vangen & Huxham, 2012). Ashkenas (2015) argues that collaboration goes beyond pleasant co-operative behaviour to the ability and flexibility of real-time alignment of goals and resources.

In operationalising the collaboration capability construct, different authors consider varied dimensions. Thomson and Perry (2006) identify five collaboration dimensions, namely governance, administration, organisational autonomy, mutuality, and norms. Blomqvist and Levy (2006) identify aspects critical to collaboration, namely trust, commitment, and communication. In this study, the levels of collaboration identified by Allred et al. (2011) and Blomqvist and Levy (2006) were considered. These are intra-departmental, intra-organisational or inter-departmental, and external collaboration. The measurement items were reconstructed from the collaboration scales put forward by Allred et al. (2011), Thomson et al., (2007) as well as measurements used by the other collaboration scholars. The full operationalisation of the collaboration capability construct and its three sub-constructs namely intra-departmental, inter-departmental, and external collaboration is presented in Appendix I.

Strategy execution

Strategy execution plays a critical role in realisation of strategy. The strategy execution process is complex, difficult, and never-ending and requires coordinated change in an organisation's internal environment (Jones & Hill, 2013; Noble, 1999). Through execution, managers proactively shape how business is conducted and mould the efforts and decisions of different divisions, departments, managers, and groups into a co-ordinated compatible whole to drive business success (Hough et al., 2011). It is execution that translates strategy into action. Despite the advancements in the field of strategic management, strategy execution remains a major challenge in many organisations. Globally, only eight percent of business leaders are effectively executing strategy (Sull et al., 2015). Additionally, many senior managers continue

to allocate more time and energy to strategy formulation and less on the intricacies of strategy execution resulting to a high failure rate of new strategies (Hambrick & Cannella, 1989; Raffoni, 2008).

Strategy execution is multidimensional. Miller (1997) argues that execution needs to take into consideration the completion of everything intended to be implemented within the expected period, achievement of the targets set, and acceptability of the method of implementation and the outcomes. To be considered effective, the chosen strategy must be successfully implemented (Thompson & Martin, 2010). Noble (1999) states that there is no ready-made recipe for effective execution cutting across all organisations and no single measure that can tell the entire story about strategy execution. Therefore, the strategy execution construct was viewed in light of various actions and outcomes. In particular, the actions were gauged through action planning and resourcing, while outcomes were gauged through strategic fit (Agnihotri, 2013; Amason, 2011; Higgins, 2005). The full operationalisation of the strategy execution construct and its three sub-constructs namely action planning, resourcing and strategic fit are presented in Appendix II.

Collaboration capability and strategy execution

The change processes that characterise execution of new strategies cut across functions requiring people to work together to achieve desired results. Participation by all throughout the entire organisation during the strategy process is important in order to achieve unity of purpose and bring order (Arasa et al., 2011). Strategy execution requires all stakeholders both internal and external to work together. Through intra-departmental, inter-departmental, and external collaboration, people think and act together.

Collaboration therefore is postulated as being critical to the success of new strategies irrespective of the kind of organisations (Neilson et al., 2008). Dezdar and Sulaiman (2009) and Kini and Basaviah (2013) highlight the need for collaboration during implementation of Enterprise Resource Planning (ERP) Systems. Additionally, Ke and Wei (2008) demonstrate that a culture of collaboration is of outmost importance during ERP implementation. Collaboration is also considered important in the implementation of research and development initiatives, in supply chain management and in relating with external stakeholders such as customers, government, and other players in the industry (Dezdar & Sulaiman 2009; Henttonen & Hurmelinna-Laukkanen, 2014; Kini & Basaviah, 2013; Simatupang & Sridharan, 2004; Soosay, Hyland & Ferrer 2008).

The ability to collaborate plays an important role during strategy execution. However, a major challenge exists when organisations, departments, teams, and individuals fail to work together. In many organisations, inter-departmental collaboration is not the norm. Anecdotal evidence suggests that many functions work in isolation thus failing to reap the full benefits of inter-departmental collaboration. This makes cross-functional execution complex and inter-functional conflict commonplace. This is expounded by Leinwand et al., (2016) who argue that when functional boundaries triumph, silo mentality prevails, and it becomes difficult to get things done. While collaboration capability is generally postulated to influence strategy execution, there are limited studies to make substantive conclusions of this linkage in the SACCO sector in Kenya. This requires further scholarly investigation and leads to the study's main research hypothesis:

H1: Collaboration capability has a significant positive influence on strategy execution.

Research Methods

Study participants

To evaluate the influence of collaboration capability on strategy execution, data was collected from heads of departments actively involved in strategy execution in 164 DT-SACCOs. The

DT-SACCOs are categorised into three tiers based on asset base. Those having an asset base of more than five billion Kenyan Shillings are considered large, five billion to one billion are medium, and less than one billion are small (SASRA, 2015). According to SASRA (2017) at the start of 2017, there were 15 large, 56 medium and 93 small duly licensed DT-SACCOs. The list of all the 164 DT-SACCOs gazetted by SASRA on 31st January 2017 and their categorisation was obtained from SASRA. The total population of heads of departments was estimated at 500 as presented in Table 1.

Table 1: Population of Heads of Departments in the 164 DT-SACCOs

Category	Asset Base in Ksh Billions	Number of SACCOs	Average Number of Heads of Departments per SACCO	Total Number of Heads of Departments
Large	> 5	15	6	90
Medium	5–1	56	4	224
Small	< 1	93	2	186
Total		164		500

In computing the sample size, a 95% confidence level equivalent of 5% level of significance widely used in business research was employed. Based on the finite population of 500 heads of departments and the 5% level of significance, the sample size was computed according to Yamane (1973) formula $n = N/[1+N(e)^2]$. Where n is the computed sample size, N is population size of 500, and *e* the error term is equivalent to the 5% level of significance (.05) giving a sample size of 222. The population was not homogenous because the 15 large SACCOs accounted for over half of the total asset base in the 164 SACCOs (SASRA, 2017). The categorisation according to asset base was therefore used to stratify the population during sampling. The sample was distributed disproportionately across the three tiers to give the best representation of the three tiers and thus increase the statistical efficiency.

Data collection

Primary quantitative data was collected using a self-administered survey questionnaire. In developing the questionnaire, rich but simple statements were generated from the operationalisation of the two variables as presented in Appendix III. The statements provoked the participants' attention on both collaboration capability and strategy execution and formed the measurement items. Collaboration capability had 22 measurement items while strategy execution had 19. All the items were measured through the respondents' perceptions using a 5-point Likert scale ranging from strongly disagree to strongly agree. The Likert scale designed by Rensis Likert is a very popular rating scale for measuring ordinal data in social science research (Bhattacherjee, 2012). The participants were requested to read the statements and indicate their level of agreement with each statement using the given scale.

A pilot study conducted prior to carrying out the main study established content validity and reliability of the data collected using the questionnaire. The pilot study sample of 28 heads of departments was selected using purposive sampling. Similar procedures were used for administration of the questionnaires during the pilot and main study. Pre-notification letters were emailed to all the 164 Chief Executive Officers (CEOs) followed up with a telephone call to confirm receipt. The letter described the study and made a request for heads of departments to participate. A letter of authority from the university accompanied the letter to the CEOs. Additionally, each questionnaire was accompanied by the participants' cover letter explaining the purpose of the study and assuring confidentiality of responses.

The research procedure was found appropriate for the study and so was the research instrument. Three of the pilot study participants were requested for feedback on the understandability and relevance of the questions. They all indicated that the questions were easily understood and interesting as they related to familiar aspects. The 22 responses received

were statistically pretested for reliability using Cronbach's alpha. The Cronbach's alpha was greater than 0.7 and it was concluded that the instrument was reliable. Bhattacherjee (2012) argues that reliability of the research instruments is a prerequisite for validity. The research instrument had also been pre-tested for validity through the expert opinion. The pilot study participants were left out of the main study.

Data analysis

After receiving the survey questionnaires from the field, the data was entered into Microsoft Excel, screened for errors and omissions and edited before transferring it to Statistical Package for the Social Sciences (SPSS). Hypothesis testing was through Covariance Based Structural Equation Modelling (CB-SEM). This statistical framework assumes multivariate normality and linearity. Therefore, the data was pre-tested for outliers, normality, and multicollinearity. These diagnostic tests indicated that the data was suitable for further analysis as it met the SEM assumptions.

The SEM process involved model specification, model identification, model estimation, model testing and model modification. The hypothesised model was specified and identified during literature review. Analysis of Moment Structures (AMOS) was the main statistical software used in model estimation, testing, and modification. Specifically, AMOS version 23 was used. Exploratory factor analysis was carried out to improve the hypothesised model because unobserved variables were used, the measurement scale was unique to the study, and the number of measurements items involved was large. Kaiser-Meyer-Olkin (KMO) and the Bartlett's Test for each variable were carried out to confirm suitability for factor analysis for both variables.

The hypothesised measurement models and the structural models were subjected to maximum likelihood CFA. Several fit indices were used to examine the model fit. These are the relative normed Chi-square which is the ratio of Chi-square to degrees of freedom ($\chi 2/df$). Wheaton et al., (1977) propose values below five as acceptable while Carmines and McIver (1981) suggest values below three. The Normed Fit Index (NFI), the Comparative Fit Index (CFI), and the Tucker-Lewis Index (TLI) were also examined. All the three indices range from zero to one with zero indicating no fit and one indicating a perfect fit. Hu and Bentler (1999) proposes that values above .95 are indicative of perfect fit while values close to 0.9 demonstrate a good fit. Further, the Root Mean Square Error of Approximation (RMSEA) was used to assess structural model fit. RMSEA assess if the approximation is good or bad and the closer the RMSEA is to zero, the better the model fit (Hox & Bechger, 1998). Pituch and Stevens (2016) point out that RMSEA of below .05 shows close fit while that of .05 to .08 presents adequate fit.

The factor loadings in the structural model which explain the strength of the correlations were evaluated. In addition, the coefficient of determination (R^2) was used to explain variance in strategy execution explained by collaboration capability. Finally, to examine the relationship between collaboration capability and strategy execution and test the hypothesis, regression coefficients namely the unstandardised estimate of covariance, the standardised regression coefficient estimate (Beta weights), Standard Error (S.E.), Critical Ratio (CR) and the significance of path coefficient (p-value) were assessed. Beta weights were used to show the strength and direction of the relationship. The significance of CR was used in either rejecting or not rejecting the null hypotheses at the .05 level of significance.

Results and Findings

The study's main objective was to examine the influence of collaboration capability on strategy execution in the DT-SACCOs in Kenya. This objective was realised by testing the null hypothesis that collaboration capability has no significant influence on strategy execution. The 191 questionnaires returned corresponded to 86% response rate. Out of these 191 questionnaires, seven were largely incomplete and one was unengaged, and they were omitted

from the final data analysis. There were 183 usable questionnaires, 41 from tier 1, 103 from tier 2, and 48 from tier 3.

Exploratory factor analysis

The collaboration capability construct had three first order constructs namely: collaboration capability intra-departmental (CCI), collaboration capability inter-departmental (CCR), and collaboration capability external (CCE). The KMO and Bartlett's Test results confirmed that all the collaboration capability constructs were suitable for factor analysis. Exploratory factor analysis was carried out and six of the 22 factors were dropped because of cross loadings and principal component loadings below 0.7 leaving 16 items. The collaboration capability factor framework is summarised in Table 1 (see Appendix III for detailed collaboration capability statements.

Table 1: Summary of the Factors under Collaboration Capability

First Order Constructs	Item	KMO	Bartlett's test	Df	Sig	Principal Component Loading	Variance Explained in %	Items Deleted
CCI	CCI1	0.9	780.297	15	0	0.849	72.311	None
	CCI2					0.900		
	CCI3					0.865		
	CCI4					0.814		
	CCI5					0.813		
	CCI6					0.858		
CCR	CCR3	0.77	194.067	6	0	0.779	60.359	CCR1 CCR2
	CCR4					0.818		
	CCR5					0.794		
	CCR6					0.712		
CCE	CCE5	0.89	677.541	15	0	0.750	68.705	CCE1 CCE2 CCE3 CCE4
	CCE6					0.834		
	CCE7					0.818		
	CCE8					0.826		
	CCE9					0.876		
	CCE10					0.864		

As presented in Table 1, the remaining six items under CCE explained 68.705% of the total variability in the construct. The four remaining items under CCR explained 60.359% of the total variability in the construct. All the six items under CCI were retained and explained 72.311% of the total variability in the construct. Overall, the three first order constructs under collaboration capability explained 68.353% of the total variability in the construct.

The strategy execution construct had three first order constructs namely; strategy execution action planning (SEA), strategy execution resourcing (SER), strategy execution strategic fit (SES). The KMO and Bartlett's Test results confirmed that the strategy execution constructs were suitable for factor analysis. Following exploratory factor analysis, six of the 19 measurement items were dropped because of cross and low loadings leaving 16 items. The strategy execution factor framework is summarised in Table 2.

As presented in Table 2, the remaining six items under SEA explained 70.241% of the total variability in the construct. The five remaining items under SER explained 68.145% of the total variability in the construct. The four items retained under SES explained 84.725% of the total variability in the construct. Overall, the three first order constructs under strategy execution explained 73.670% of the total variability in the construct.

Table 2: Summary of the Factors under Strategy Execution

First order constructs	Item	KMO	Bartlett's test	Df	Sig	Variance extracted	PCA Component loading	Items deleted
SEA	SEA1	0.89	977.121	21	0	70.241	0.871	SEA7
	SEA2						0.844	SEA9
	SEA3						0.885	
	SEA4						0.886	
	SEA5						0.842	
	SEA6						0.744	
	SEA8						0.786	
SER	SER1	0.88	456.555	10	0	68.145	0.871	SER2 SER6
	SER3						0.838	
	SER4						0.772	
	SER5						0.796	
	SER7						0.847	
SES	SES1	0.58	905.286	6	0	84.725	0.93	SES5, SES6
	SES2						0.928	
	SES3						0.917	
	SES4						0.906	

Measurement models analysis

The collaboration capability and strategy execution hypothesised measurement models were subjected to maximum likelihood CFA on Amos 23. The relative normed Chi-square values (χ^2/df) were less than three; the NFI, TLI and CFI were above .900 indicating an adequate fit between the hypothesised model and the sample data. These fit indices are presented in Table 3.

Table 3: Model Fit Indices for the Measurement Models

Fit Indices	Collaboration Capability	Strategy Execution	Adequate Fit	Conclusion
χ^2	178.698	249.415		
df	101	101		
χ^2/df	1.769	2.469	<3	Adequate Fit
NFI	0.906	0.929	≈.90	Adequate Fit
TLI	0.938	0.905	≈.90	Adequate Fit
CFI	0.936	0.901	≈.90	Adequate Fit

Structural model analysis and hypothesis testing

Finally, the structural model relating collaboration capability to strategy execution was subjected to maximum likelihood CFA. The model fit indices were examined and an opportunity to modify and improve the model was identified. The modification was based on the significance of modification indices of error terms within the CCI first order construct as well as logic. The modification details are presented in Table 4.

Table 4: The Modification Indices for Collaboration Capability and Strategy Execution Model

Path	M.I.	Par Change	Findings
e33 <--> e69	113.675	.178	Correlation between measurement error of the same first order construct

The modification involved linking error term e33 to e69 in the CCI first order construct. The fit indices of the structural model were evaluated and are presented in Table 5. The relative normed Chi-square (χ^2/df) value of 2.127 indicated an adequate fit between the hypothesised structural model and the sample data. In addition, the NFI, CFI, and TLI ranged from 0.899 to 0.909 indicating an adequate fit. The RMSEA [.058 (90% CI: .071, .085) with p > .050] was also within the acceptable range indicating a reasonable error of approximation of the model.

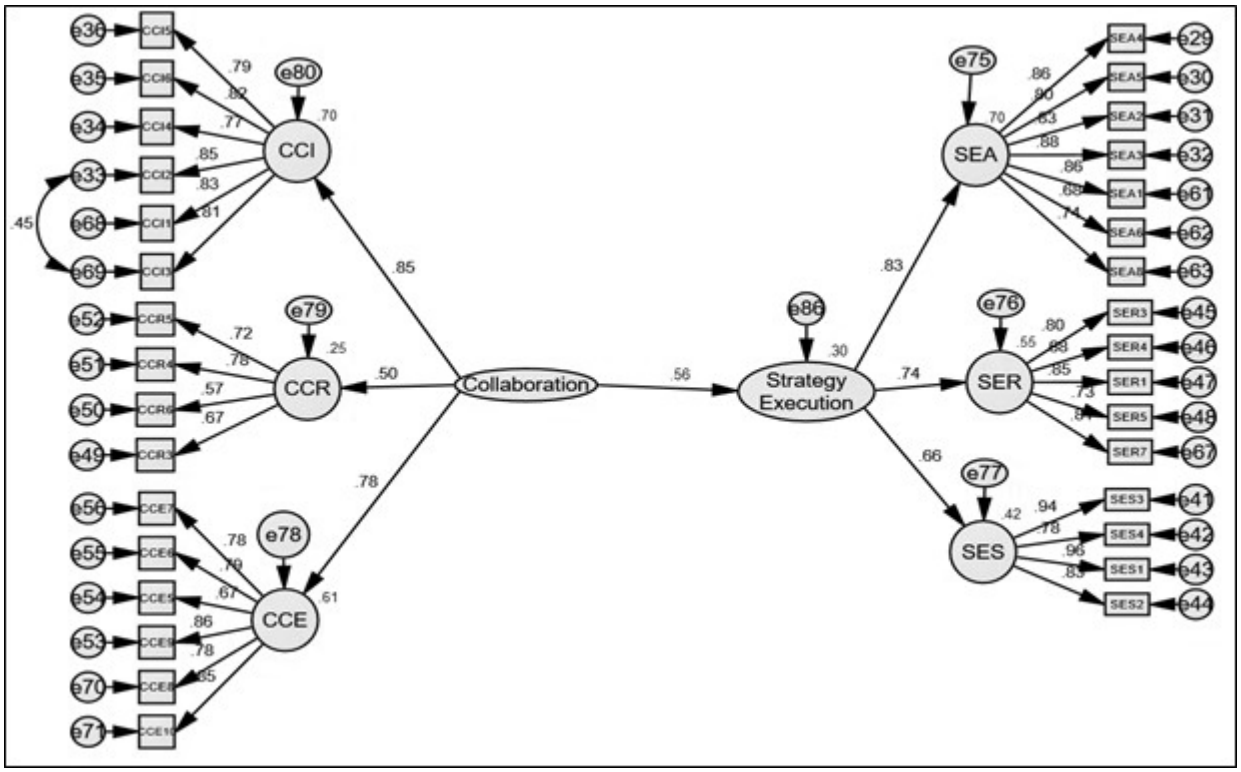
Table 5: Model Fit Indices for Relationship between Collaboration Capability and Strategy Execution

Fit Indices	Values	Adequate Fit	Conclusion
χ^2	970.11		
df	456		
χ^2/df	2.127	<3	Adequate Fit
NFI	0.909	≈.90	Adequate Fit
TLI	0.899	≈.90	Adequate Fit
CFI	0.907	≈.90	Adequate Fit
RMSEA	0.058	<.08	Adequate Fit
PCLOSE	0.09	>.05	Close Fit

The indices suggested that the data was an adequate fit of the hypothesised structural model relating collaboration capability and strategy execution. The path diagram resulting from the modified structural model is presented in Figure 1.

According to path diagram on Figure 1, all the factor loadings were equal to or above 0.5 and were therefore within the acceptable range. In addition, the R^2 was 0.30 indicating that collaboration capability explained 30% of the variance in strategy execution. The unexplained variance resulted from other factors not in the model and the error terms in the model. The Beta weight was .56 (β = 0.56) indicating that the relationship between collaboration capability and strategy execution was in the same positive direction. A change of one standard deviation in the collaboration capability will result in a change of .56 standard deviations in strategy execution.

Figure 1: SEM Path Diagram - Relationship between Collaboration Capability and Strategy Execution



The structural model regression coefficients namely Beta, S.E., CR and the p-values were examined. In particular, the p-value of the CR was used to assess the significance of the relationship along the main path between collaboration capability and strategy execution and thus test the third null hypothesis. The results of the regression coefficients are summarised in Table 6.

As presented in Table 6, all the paths in the model had p-values of less than .05 and thus were statistically significant at .05 level of significance. In particular, the CR value for the collaboration capability and strategy execution hypothesised path was at 8.947 and its p-value was less than .05. This p-value tested the third null hypothesis in this study at .05 level of significance. The p-value was found to be statistically significant at .05 level of significance and the null hypothesis (H_0) that collaboration capability has no positive significant influence on strategy execution was rejected. Therefore, the study findings support the alternative hypothesis (H_1) that collaboration capability has a positive significant influence on strategy execution.

Table 6: Regression Coefficients for Relationship between Collaboration Capability and Strategy Execution

Path	Unstandardised Estimate	Beta (β)	S.E.	C.R.	P
Strategy Execution <--- Collaboration	1.030	0.562	0.115	8.947	***
CCI <--- Collaboration	1.061	0.850	0.115	9.208	***
CCE <--- Collaboration	1	0.776			
SEA <--- Strategy Execution	1	0.832			
SER <--- Strategy Execution	0.941	0.741	0.113	8.301	***
SES <--- Strategy Execution	1.008	0.657	0.121	8.327	***
CCR <--- Collaboration	0.473	0.498	0.094	5.052	***

Note: P < 0.05 *, P < 0.01 **, P < 0.001***

Discussion and Conclusions

The findings from this study show that collaboration capability positively influences strategy execution. Collaboration was viewed to go beyond co-operation among SACCOs and to encompass the interrelationships that happen internally within and across departments and externally with other organisations and business partners. The SACCO movement is tightknit with co-operation among co-operatives being one of the seven co-operative principles that the movement esteems. The study found that intra-departmental, inter-departmental, and external collaboration all positively influence the collaboration capability which in turn influences strategy execution. In particular, the intra-departmental collaboration was found to have the highest influence on collaboration capability

These findings are comparable to findings from past studies that demonstrate the need for teamwork, co-operation or collaboration during implementation of new strategies. The findings specifically capture collaboration and strategy execution in their entirety. Most past studies have mainly focused on the critical role that internal collaboration plays during implementation of technology projects and research and development initiatives. Hoegl and Gemuenden (2001) found a strong link between teamwork quality and success of innovative projects. Further, Dezdar and Sulaiman (2009) and Kini and Basaviah (2013) found that enterprise-wide co-operation and user involvement respectively are critical during ERP implementation. Additionally, Moreira and Silva (2014) found that collaboration with customers is crucial during implementation of marketing innovations. Similarly, a study by Henttonen and Hurmelinna-Laukkanen (2014) points out the need for collaboration during research and development projects. This study therefore extends the influence of collaboration on strategy execution beyond ERP implementation and new product development to overall corporate strategy.

The positive influence of external collaboration on strategy execution also extends findings from past studies. Bidault et al. (2018) found that inter business collaborations are crucial and require organisations to first build trust. In the SACCOs context, findings by Taylor (2009) advance the need for SACCOs to collaborate externally by having single back-office operations supporting a number of them. To successfully collaborate externally, SACCOs need to build trust across organisational boundaries making it easy for them to work with each other and with other players in the sector.

A few past studies seem to contradict the main findings from this study. Dooley et al. (2000) found that pushing for decision commitment slows down the implementation speed; however, this finding could be postulated to be specific to the hospital sector studied. From a different perspective, Lundin (2007) notes that collaboration is paramount for complex tasks and policies but is not essential for the less complex ones. This implies that not all tasks require collaboration. Strategy execution is viewed as a complex task. The need for collaboration should therefore be heightened during strategy execution.

Overall, this study enriches the body of knowledge on the influence of collaboration capability on strategy execution with a focus on both internal and external collaboration.

Two broad conclusions can be made from this study. First, internal collaboration often referred to by many as teamwork or simply working together is key to strategy execution. The board, management, and staff who work together as a team are better placed to effectively execute strategy. To improve internal collaboration, it is recommended that all work together as one team. There is need also to involve everyone in the strategy process, share resources across functions, hold cross-functional working sessions, allow free flow of information, have a reward system for collaborative behaviour, work out complex issues together, and strive to break down departmental silos. By involving all internal stakeholders in the strategy process, SACCOs are better placed to pull together in the same direction and own the strategy execution process internally.

The other major conclusion is that SACCOs that collaborate with each other and with other external stakeholders execute strategy with more ease. Collaboration in SACCOs needs to go beyond benchmarking tours that are common in most Kenyan SACCOs today to finding real solutions to the problems facing the sector. SACCOs can improve external collaboration by being more strategic and systematic in their collaboration efforts. Associations such as the World Council of Credit Unions (WOCCU), Africa Confederation of Cooperative Savings and Credit Associations (ACCOSCA), Kenya Union of Saving and Credit Co-operatives (KUSCCO) and local associations should be at the forefront in supporting SACCOs to achieve their goals.

Overall, this study enriches the body of knowledge on the influence of collaboration capability on strategy execution with a focus on both internal and external collaboration. The study is limited in the study population. It is therefore proposed that further research on collaboration capability extends to other study population such as staff members and external stakeholders. In addition, a study on the influence of collaboration capability on strategy execution cutting across different sectors is proposed. This is because the sector under study is unique and this data may not be generalisable to all other sectors.

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References

Agnihotri, A. (2013). How much is strategic fit important? *Business Strategy Series, 14*(4), 99-105. https://doi.org/10.1108/BSS-04-2013-0034

Allred, C. R., Fawcett, S. E., Wallin, C. & Magnan, G. M. (2011). A dynamic collaboration capability as a source of competitive advantage. *Decision Sciences, 42*(1), 129-161. https://doi.org/10.1111/j.1540-5915.2010.00304.x

Alpander, G. G., & Lee, C. R. (1995). Culture, strategy and teamwork: The keys to organisational change. *The Journal of Management Development, 14*(8), 4-18. https://doi.org/10.1108/02621719510097389

Alter, C., & Hage, J. (1993). *Organizations working together*. Newbury Park, CA: Sage Publications.

Amason, A. C. (2011). *Strategic management from theory to practice*. New York, NY: Routledge.

Arasa, R. M., Aosa, E. O., & Machuki, V. N. (2011). Participatory orientation to strategic planning process: Does it pay? *Prime Journal of Business Administration and Management, 1*(10), 198-204.

Armstrong, M. (2008). *Strategic Human resource management: A guide to action*. London, UK: Kogan Page.

Ashkenas, R. (2015, April 20). There's a difference between co-operation and collaboration. *Harvard Business Review*. https://hbr.org/2015/04/theres-a-difference-between-cooperation-and-collaboration

Bhattacherjee, A. (2012). *Social science research: principles, methods, and practices*. Tampa, FL: University of South Florida.

Bidault, F., de la Torre, J. R., Batten, J. K., Zanakis, S. H. & Smith Ring, P. (2018). Willingness to rely on trust in global business collaborations: Context vs. demography. *Journal of World Business, 53*(3), 373-391. https://doi.org/10.1016/j.jwb.2016.08.001

Blomqvist, K., & Levy, J. (2006). Collaboration capability – a focal concept in knowledge creation and collaborative innovation in networks. *International Journal of Management Concepts and Philosophy, 2*(1), 31–48. https://doi.org/10.1504/IJMCP.2006.009645

Carmines, E. C., & McIver, J. P. (1981). Analyzing models with unobserved variables: Analyisis of covariance structures, (pp. 65-115). In G. W. Bohrnstedt & E. F. Borgatta (Eds.). *Social Measurement: Current Issues*. Beverley Hills, CA: Sage.

David, F. R. (2011). *Strategic management, concepts and cases.* Upper Saddle River, NJ: Prentice Hall.

Dezdar, S., & Sulaiman A. (2009). Successful enterprise resource planning implementation: taxonomy of critical factors. *Industrial Management & Data Systems, 109*(8), 1037-1052. https://doi.org/10.1108/02635570910991283

Dooley, R. S., Fryxell G. E., & Judge W. Q. (2000). Belaboring the not-so-obvious: Consensus, commitment, and strategy implementation speed and success. *Journal of Management, 26*(6), 1237-1257. https://doi.org/10.1177/014920630002600609

Gomez-Mejia, L. R., Balkin, D., & Cardy, R. (2011). *Managing human resources*. New Jersey: Prentice Hall.

Gray, B. (1989). *Collaborating: Finding common ground for multiparty problems.* San Francisco, CA: Jossey-Bass.

Hambrick, D. C., & Cannella, A. A. (1989). Strategy implementation as substance and selling. *Academy of Management Executive, 3*(4), 278-285.

Henttonen, K., & Hurmelinna-Laukkanen, P. (2014). Determinants of R&D collaboration: An empirical analysis. *International Journal of Innovation Management, 18*(4). https://doi.org/10.1142/S1363919614500261

Higgins, J.M. (2005). Eight 'S's of successful strategy execution. *Journal of Change Management, 5*(1), 3-13. https://doi.org/10.1080/14697010500036064

Hoegl, M., & Gemuenden, H. G. (2001). Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence. *Organisation Science, 12*(4). 435-449. https://doi.org/10.1287/orsc.12.4.435.10635

Hough, J., Thompson, A. A., Strickland, A. J., & Gamble, J. E. (2011). *Crafting and executing strategy: Creating sustainable high performance in South African businesses*. London, UK: McGraw-Hill.

Hox, J. J. & Bechger, T. M. (1998). An introduction to structural equation modeling. *Family Science Review, 11*, 354-373.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55. https://doi.org/10.1080/10705519909540118

Jones, G. R., & Hill, C. W. L. (2013). *Theory of strategic management with cases*. Mason, OH: South-Western Cengage Learning.

Kanter, R. M. (1994). Collaborative advantage: The art of alliances. *Harvard Business Review, 72*(4). 96–108. https://hbr.org/1994/07/collaborative-advantage-the-art-of-alliances

Ke, W., & Wei, K. K. (2008). Organisational culture and leadership in ERP implementation. *Decision Support Systems, 45*, 208-218. https://doi.org/10.1016/j.dss.2007.02.002
Kini, R. B., & Basaviah, S. (2013). Critical success factors in the implementation of enterprise resource planning systems in small and midsize businesses: Microsoft Navision implementation. International *Journal of Enterprise Information Systems, 9*(1), 97-117. https://doi.org/10.4018/jeis.2013010106
Leinwand, P., Mainardi, C., & Kleiner, A. (2015, December 22). 5 Ways to close the strategy to-execution gap. *Harvard Business Review*. Retrieved from https://hbr.org/2015/12/5-ways-to-close-the-strategy-to-execution-gap
Leinwand, P., Mainardi, C., & Kleiner, A. (2016, February 2). Develop your company's cross-functional capabilities. *Harvard Business Review*. Retrieved from https://hbr.org/2016/02/develop-your-companys-cross-functional-capabilities
Logsdon, J. M. (1991). Interests and interdependence in the formation of social problem-solving collaborations. *Journal of Applied Behavioral Science, 27*(1), 23-37. https://doi.org/10.1177/0021886391271002
Lundin, M. (2007). When does co-operation improves public policy implementation? *The Policy Studies Journal, 35*(4), 629-652. https://doi.org/10.1111/j.1541-0072.2007.00240.x
McKillop, D.G. & Wilson, J.O.S. (2010). Credit unions; A theoretical overview. *SSRN*. http://dx.doi.org/10.2139/ssrn.1702782
Miller, S. (1997). Implementing strategic decisions: four key factors. *Organisation Studies, 18*(4), 577-602. https://doi.org/10.1177/017084069701800402
Moreira, J., & Silva, M. J. A. M. (2014). Co-operation between the consumer and firms as a determinant of marketing innovation: Empirical study of Portuguese firms. *Contemporary Management Research, 10*(3), 215-232. https://doi.org/10.7903/cmr.12370
Moturi, C., & Mbiwa, P. (2015). An evaluation of the quality of management information systems used by SACCOs in Kenya. *The TQM Journal, 27*(6), 798-813. https://doi.org/10.1108/TQM-05-2015-0065
Neilson, G. L. Martin, K. L. & Powers, E. (2008, June). The secrets to successful strategy execution. *Harvard Business Review.* https://hbr.org/2008/06/the-secrets-to-successful-strategy-execution
Noble, C. H. (1999). The eclectic roots of strategy implementation research. *Journal of Business Research, 45*(2), 119–134. https://doi.org/10.1016/S0148-2963(97)00231-2
Norton, D. P. (2008, August 1). Strategy execution needs a system. *Harvard Business Review*, Retrieved from https://hbr.org/2008/08/strategy-execution-needs-a-sys.html
Payne, J. (2008). Using wikis and blogs to improve collaboration and knowledge sharing. *Strategic Human Resources Review Journal, 7*(3), 5-12. https://doi.org/10.1108/14754390810865757
Pearce, J. A., & Robinson, R. B. (2011). *Strategic management: Formulation, implementation, and control*. Boston, MA: McGraw-Hill.
Pituch, K. A. & Stevens, J. R. (2016). *Applied multivariate statistics for the social sciences.* New York, NY: Routledge.
Raffoni, M. (2008, February 26). Three keys to effective execution. *Harvard Management Update, 13*(6), 3–4. https://hbr.org/2008/02/three-keys-to-effective-execut
Roghé, F., Toma, A., Kilmann, J., Dicke, R. & Strack, R. (2012, January 31). *Organisational capabilities Matter. Organization of the future: designed to win.* Boston Consulting Group (BCG). https://www.bcg.com/en-gb/publications/2012/leadership-engagement-culture-organizational-capabilities-matter
Rosen, E. (2007). *The culture of collaboration.* San Francisco: Red Ape Publishing.
Sacco Societies Regulatory Authority [SASRA]. (2014). *SACCO supervision annual report, 2014 (Deposit-taking SACCOs)*. Nairobi: SASRA.
SASRA. (2015). *SACCO supervision annual report, 2015 (Deposit-taking SACCOs)*. Nairobi: SASRA
SASRA. (2017). *Gazette notice – 2017 Licensed SACCOS.* Nairobi. https://www.sasra.go.ke/index.php/regulation/licensed-saccos#.WkpBklXXbIU
Simatupang, T. M., & Sridharan, R. (2004). Benchmarking supply chain collaboration: An empirical study. *Benchmarking: An International Journal, 11*(5), 484-503. https://doi.org/10.1108/14635770410557717
Soosay, C. A., Hyland, P. W., & Ferrer, M. (2008). Supply chain collaboration: capabilities for continuous innovation. *Supply Chain Management: An International Journal, 13*(2), 160-169. Doi.org/10.1108/13598540810860994
Sull, D., Homkes, R., & Sull, C. (2015). Why strategy execution unravels — and what to do about it. *Harvard Business Review, 93*(3), 58-66.
Taylor, M. (2009). *A road map for credit union back-office collaboration.* Madison, WI: Filene Research Institute.
Thompson, J., & Martin, F. (2010). *Strategic management awareness and change*. Hampshire: South-Western Cengage Learning.
Thompson, A. A., Peteraf, M. A., Gamble, J. E. & Strickland, A. J. (2016). *Crafting and executing strategy, the quest for competitive advantage, concepts and readings.* London, UK: McGraw-Hill.

Thomson, A. M., & Perry, J. L. (2006). Collaboration Processes: Inside the Black Box. *Public Administration Review, 66*(1), 20-32.
Thomson, A. M., Perry, J. L. & Miller, T. K. (2007). Conceptualizing and measuring collaboration. *Journal of Public Administration Research and Theory, 19*(1), 23-56.
Ulrich, D. & Smallwood, N. (2004). Capitalizing on capabilities. *Harvard Business Review 82*(6), 119-127.
Vangen, S., & Huxham, C. (2012). The tangled web: Unraveling the principle of common goals in collaborations. *Journal of Public Administration Research and Theory, 22*(4), 731–760. https://doi.org/10.1093/jopart/mur065
Wheaton, B., Muthén, B., Alwin, D. F. & Summers, G. F. (1977). Assessing reliability and stability in panel models. In D. R. Heise, [Ed.], *Sociological methodology 1977*. San Francisco: Jossey-Bass, 84–136.
Whitney, K. (2013, November 1). Can collaboration be forced? *Talent management,* 46-47. http://www.theculturefofcollaboration.com/media/Talent%20Management%20Evan%20Rosen%20Interview.pdf
Yamane, T. (1973). *Statistics, an introductory analysis*. New York, NY: Harper and Row.

APPENDIX I: Collaboration Capability Operationalisation Matrix

	Operationalisation of Intra-Departmental Collaboration	**Reference**
1.	A history of efforts to collaborate within departments	Allred et al. (2011)
2.	Willingness of staff to work together within departments	Blomqvist and Levy (2006)
3.	Unrestricted sharing of crucial information within departments	Neilson et al. (2008)
4.	Regular performance review meetings within departments	Neilson et al. (2008)
5.	Systematic way of rewarding collaborative behaviour	Whitney (2013)
	Operationalisation of Inter-Departmental Collaboration	
1.	Willingness of functions to work together	Blomqvist and Levy (2006)
2.	Environment of trust that encourages cross functional collaboration trusting people from other functions during cross-functional initiatives	Payne (2008); Whitney (2013); Thomson et al. (2007)
3.	Sharing of resources across functions	Alter and Hage (1993)
4.	Cross-functional working session with all of the required collaborators from different areas of the SACCO	Ashkenas (2015a)
5.	Working through any differences or conflicts to arrive at win–win solutions	Thomson et al. (2007)
6.	Striving to break down departmental silos	Ashkenas (2015b)
	Operationalisation of External Collaboration	
1.	Sharing of important information with members	Allred et al. (2011)
2.	Frequent, open information-sharing among SACCOs	Allred et al. (2011)
3.	Efforts to establish common goals among SACCOs	Allred et al. (2011)
4.	Senior-level managers' interaction with others in other SACCOs	Allred et al. (2011)
5.	Sharing of important information with partners	Allred et al. (2011)
6.	Taking into consideration potential strategic partnerships	Kanter (1994)
7.	Clear guidelines for managing external collaborations such as with suppliers	Allred et al. (2011)
8.	Brainstorming sessions with partner organisations to develop solutions	Thomson et al. (2007)
9.	Partner organisations taking opinions seriously	Thomson et al. (2007)
10.	External collaboration aiding meeting of own goals	Thomson et al. (2007)

Appendix II: Strategy Execution Operationalisation Matrix

	Operationalisation of Action Planning	Reference
1.	Measurable short-term objectives	Pearce and Robinson (2011)
2.	Measurable long-term objectives	David (2011)
3.	Specific actions or activities	Pearce and Robinson (2011); Thompson and Martin (2010)
4.	Clear time frame for completion of each action	Pearce and Robinson (2011)
5.	Clear accountability	Pearce and Robinson (2011)
6.	Clear milestones	Thompson and Martin (2010)
7.	Targets tied to incentives	Thompson et al. (2016)
8.	Formal strategy execution system	Norton (2008)
9.	Strategy reviews	Norton (2008); Hough et al. (2011)
	Operationalisation of Resourcing	
1.	Resource allocations according to the priority areas identified in the strategic plan	Thompson and Martin (2010); Pisano (1994)
2.	A budget in support of the strategic actions	Thompson et al. (2016)
3.	Budgets disbursed according to timelines	Thompson and Martin (2010)
4.	Proper management of financial resources	Thompson and Martin (2010)
5.	Human resources strategies aligned to overall corporate strategy	Armstrong (2008)
6.	Organisation attracts /retains staff who best fit the Organisation's objectives	Gomez-Mejia, Balkin and Cardy (2011)
7.	Adjustments in resourcing based on major changes in strategic direction	Thompson et al. (2016)
	Operationalisation of Strategic Fit	
1.	Strategy supportive policies	David (2011)
2.	Strategy matched to structure	David (2011)
3.	Strategy supportive culture	David (2011)
4.	Strategy matched to external environment	Jones and Hill (2013)
5.	Strategic direction aligned to the economic conditions	Pearce and Robinson (2011)
6.	Strategy matched to societal needs	Pearce and Robinson (2011)
7.	Strategy in line with the regulatory requirements	Pearce and Robinson (2011)

APPENDIX III: Measurements and Codes for the Collaboration Capability and Strategy Execution Variables

Code	Collaboration Capability Statements
	Collaboration Capability – Intra Departmental (CCI)
CCI1	We have a history of collaboration within the departments
CCI2	Our staff demonstrate willingness to work together within departments
CCI3	We share crucial information within departments
CCI4	We hold regular performance review meetings within departments
CCI5	We have a systematic way of rewarding collaborative behaviour
CCI6	We work out complex issues within our departments together
	Collaboration Capability – Inter Departmental (CCR)
CCR1	Departments demonstrate willingness to work each other
CCR2	We have cultivated trust across functions
CCR3	We share resources across functions
CCR4	We hold cross-functional working sessions
CCR5	We work together through conflicts to arrive at solutions
CCR6	We strive to break down departmental silos
	Collaboration Capability – External (CCE)
CCE1	We share important information with members
CCE2	We participate in open information sharing with other SACCOs
CCE3	We participate in efforts to establish common goals among SACCOs
CCE4	We interact with managers in other SACCOs
CCE5	We share important information with our partners
CCE6	We take into consideration potential strategic partnerships
CCE7	We have clear guidelines for managing our suppliers
CCE8	We hold brainstorming sessions with our partners to develop solutions
CCE9	Our partner organisations take our opinions seriously
CCE10	Our external collaboration is helping us meet our goals
Code	**Strategy Execution Statements**
	Strategy Execution – Action Planning
SEA1	We have measurable short-term objectives
SEA2	We have measurable long-term objectives
SEA3	We have specific actions in support of our objectives
SEA4	We have a clear time frame for completion of each action
SEA5	We have clear accountability for the actions
SEA6	We have clear milestones in our strategic plan
SEA7	Achievement of targets in our strategic plan is tied to incentives
SEA8	We have a formal process that guides our strategy execution
SEA9	We review our strategy regularly
	Strategy Execution - Resourcing
SER1	Our resource allocation is according to the priority areas identified in the strategic plan
SER2	We have a budget in support of the strategic actions
SER3	Our budget is disbursed according to planned timelines
SER4	We manage our financial resources proficiently
SER5	Our human resources strategies are aligned to our overall strategy
SER6	Our staff are a good fit to our strategy
SER7	We make adjustments in resourcing based on major changes in our strategic direction
	Strategy Execution – Strategic Fit
SES1	We have in place policies in support of our strategy
SES2	Our structure matches our strategy
SES3	Our culture supports our strategy
SES4	Our strategic direction is aligned to economic conditions around us
SES5	Our strategy is matched to societal needs
SES6	Our strategy is in line with the regulatory requirements