



Research Article

Predictive Power of Network Development Capability on Firm Performance: Empirical Evidence from Deposit-Taking Savings and Credit Cooperative Societies in Kenya

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Abstract

The Savings and Credit Cooperative Societies (SACCOs) sector in Kenya plays a critical role in promoting financial inclusion through the provision of affordable savings and credit services. However, despite growth in assets and membership, deposit-taking SACCOs (DT-SACCOs) continue to face challenges, including slow loan processing, increasing customer complaints, operational inefficiencies, and declining stakeholder confidence. These challenges highlight the need to strengthen organizational capabilities, particularly network development capability. This study examined the predictive power of network development capability on the performance of DT-SACCOs in Nairobi City County, Kenya. The study was anchored on Relational View Theory, Dynamic Capabilities Theory, and the Balanced Scorecard Model. An explanatory research design was adopted. The target population comprised 475 senior- and middle-level management employees from 41 DT-SACCOs, from which a sample of 215 respondents was selected using proportionate stratified sampling. Data were collected using semi-structured questionnaires comprising both closed- and open-ended questions. Quantitative data were analyzed using descriptive and inferential statistics with the aid of SPSS, while qualitative responses were analyzed thematically. The findings revealed that network development capability had a positive and statistically significant predictive effect on firm performance ($\beta = 0.462$, $p = 0.001$). The qualitative findings further indicated that strategic partnerships, trust building, strategic alignment, communication, and network governance were important aspects of network development capability, although challenges remained in implementing collaborative projects, optimizing relationships, and integrating communication systems. The study concludes that strengthening network development capability can enhance the performance of DT-SACCOs. It therefore recommends that SACCOs prioritize trust building, formalize partnership agreements, strengthen communication and coordination mechanisms, and align networking activities with strategic objectives to improve operational efficiency, customer satisfaction, stakeholder confidence, and overall organizational performance.

Keywords

Network Development, Organization Performance, Deposit Taking Savings and Credit Cooperative Society

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Received: 21 August 2026; **Accepted:** 7 September 2026; **Published:** 27 September 2026



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1. Introduction

Globally, firm performance is critical to economic growth, competitiveness, and sustainability, particularly in emerging markets. Strong firm performance contributes to capital formation, encourages investment, and supports sustained economic activity [24]. High-performing firms are also more likely to demonstrate effective governance, reinvest in organizational development, and engage stakeholders, thereby strengthening organizational resilience and contributing to broader economic development [39]. Within this context, networking capability provides firms with opportunities to access external resources, exchange knowledge, develop strategic relationships, and establish long-term partnerships that can enhance organizational performance. For DT-SACCOs, the ability to develop and effectively manage such networks may therefore be particularly important in strengthening their competitiveness, service delivery, and sustainability.

In the United States, credit unions are important players in the cooperative financial sector, serving more than 137 million members and holding approximately US\$2.2 trillion in assets by 2024, with the sector recording an annual growth rate of more than 6% [8]. Similarly, cooperative banks in Germany account for approximately 30% of the retail banking market and collectively manage assets exceeding €1.2 trillion, reflecting their strong community orientation and financial resilience [14]. U.S. credit unions also reported an average return on assets (ROA) of 0.84% in 2023, indicating relatively stable financial performance despite broader economic fluctuations [42].

Regionally, DT-SACCOs and other cooperative financial institutions continue to face challenges related to credit, interest rate, liquidity, and operational risks [52]. In Nigeria, investment and credit cooperative societies in Kaduna State mobilized more than ₦12 billion in savings and disbursed loans exceeding ₦9 billion between 2020 and 2023, contributing to household welfare and small enterprise development [2]. Similarly, farmers' cooperative societies in Southeast Nigeria recorded loan repayment rates above 85%, with financial performance closely associated with agricultural productivity and access to credit [38]. In Burundi, thrift and credit cooperatives have experienced increased rural savings mobilization, with more than 65% of members reporting improved access to short-term credit facilities [1, 37]. Beyond financial intermediation, cooperative institutions across Africa are increasingly leveraging inter-organizational networks to strengthen their operations and expand outreach.

Locally, recent evidence points to persistent performance challenges among DT-SACCOs in Kenya. In Nairobi City County, more than 40% of DT-SACCOs reportedly experienced declines in market share and profitability, alongside increased customer complaints, between 2018 and 2022, with rising non-performing loans and inefficient asset utilization identified as contributing factors [4]. Similarly, SASRA [46] reported weaknesses in strategic management and networking

practices among a substantial proportion of SACCOs, which have contributed to inefficiencies and weaknesses in financial planning. Liquidity management also remains a concern, with some DT-SACCOs reportedly failing to meet prescribed liquidity thresholds, thereby constraining their ability to meet member withdrawal and lending obligations [32]. Corporate governance challenges, including board competence and oversight, have further been associated with increased financial risks and weakened member confidence [10]. Although networking capabilities and other institutional mechanisms have the potential to strengthen DT-SACCO performance, their benefits may not be fully realized where institutions face limitations in compliance, awareness, and implementation [17].

2. Statement of the Problem

Deposit-Taking Savings and Credit Cooperative Societies (DT-SACCOs) in Kenya play a significant role in financial inclusion by providing savings and credit services to underserved populations at relatively affordable rates. The sector has continued to grow, with the SACCO Societies Regulatory Authority [47] reporting a 10.2% increase in total assets to KSh 981.5 billion and a 9.95% increase in member deposits to KSh 682.19 billion in 2023. However, this growth has been accompanied by persistent performance and operational challenges. In 2023, growth in loans issued exceeded growth in deposits mobilized by KSh 76.4 billion, while the core capital ratio declined from 16.36% in 2022 to 15.75% in 2024. Operational efficiency also remains a concern, as average loan processing time increased by 7.9%, while non-performing loans rose from 6.15% in 2019 to 11.86% in 2024. These trends suggest that growth in the sector has not necessarily been accompanied by corresponding improvements in operational efficiency and financial sustainability.

DT-SACCOs also face challenges relating to customer and stakeholder outcomes. Although membership increased by 6.57% to 6.84 million and the proportion of transactions conducted through SACCOs rose from 9.6% in 2021 to 11.7% in 2024, concerns regarding customer satisfaction, stakeholder confidence, risk management, and corporate governance persist. These challenges indicate that growth in membership, assets, and deposits alone may not guarantee sustained firm performance. DT-SACCOs operate in an increasingly dynamic environment characterized by technological change, changing member expectations, competition from other financial service providers, and increasing regulatory demands. Consequently, the ability to develop and manage external relationships, access resources and knowledge, communicate effectively, and coordinate network activities may be critical to enhancing customer satisfaction, operational efficiency, stakeholder confidence, and competitiveness. Network development capability therefore provides a potentially important mechanism through which DT-SACCOs can leverage external

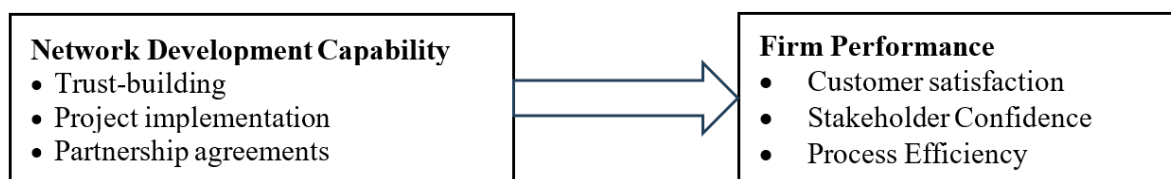
relationships and resources to improve firm performance.

However, despite the increasing importance of networking in organizational adaptation and performance, empirical evidence on the predictive power of network development capability on the performance of DT-SACCOs in Kenya remains limited. Existing studies have largely focused on other organizational contexts, including SMEs, rural e-commerce platforms, and public-sector networks, with limited attention to cooperative financial institutions. Moreover, much of the existing evidence emphasizes broad outcomes such as innovation, sustainability, or competitive advantage rather than the multidimensional performance of DT-SACCOs. This creates a contextual and empirical gap regarding whether and to what

extent network development capability predicts firm performance within the Kenyan DT-SACCO sector. The present study therefore sought to establish the predictive power of network development capability on the performance of DT-SACCOs in Nairobi City County, Kenya.

3. Conceptual Framework

The conceptual model for the relationship between networking development capability and firm performance is presented in Figure 1.



Source: Author (2025)

Figure 1. Conceptual Model.

3.1. Objectives of the Study

To determine the effect of network development capability on firm performance in DTS in Nairobi City County, Kenya.

3.2. Research Hypotheses

The research hypotheses for this study are formulated in both null and alternative forms.

H₀: Network development capability does not significantly predict firm performance among deposit-taking savings and credit cooperative societies in Nairobi City County, Kenya.

H₁: Network development capability significantly predicts firm performance among deposit-taking savings and credit cooperative societies in Nairobi City County, Kenya.

4. Theoretical Literature Review

Relevant theoretical literature was reviewed to provide a compelling theoretical basis for the key concepts and the postulated relationships among them.

4.1. Dynamic Capabilities Theory

The notion that firm capabilities influence strategic outcomes has its roots in the seminal works of Schumpeter [49], Penrose [40], Barney [7], and Teece and Pisano [54]. Building on these foundations, Teece, Pisano, and Shuen [55] devel-

oped the Dynamic Capabilities Theory to address a fundamental question in strategic management: how firms develop and sustain competitive advantage in dynamic environments. The theory posits that possessing valuable resources and capabilities alone may not be sufficient to ensure long-term success. Although resources can provide advantages in the short term, sustained competitive advantage depends on a firm's ability to continually renew, integrate, and reconfigure its resources and capabilities in response to changes in the business environment [53].

Dynamic Capabilities Theory is closely related to networking capability because it provides a framework for understanding how firms develop, deploy, and renew relational and organizational capabilities in response to changes in their external environment. Networking capability, reflected in areas such as network expansion, relationship development, internal communication, and network management, enables firms to sense and seize external opportunities and reconfigure organizational resources and relationships accordingly. This perspective is supported by Pujianto, Putri, Aini, and Kamila [44], who found that firms with stronger networking capabilities demonstrate greater adaptability and potential for innovation. Similarly, Arasti, Garousi Mokhtarzadeh, and Jafarpanah [5] observed that the ability to develop and manage organizational networks enables firms to access diverse knowledge flows that are important for strategic renewal. Thus, Dynamic Capabilities Theory provides a relevant theoretical basis for explaining how network development capability can contribute to firm performance among DT-SACCOs.

Internal communication and relationship management are important in leveraging network ties to support innovation and

organizational performance. This is consistent with Teece's [53] proposition that enterprise-level complementarities facilitate innovation by enabling firms to integrate and coordinate internal and external resources. Effective communication and relationship management can therefore facilitate the exchange of knowledge, coordination of activities, and utilization of external relationships for organizational renewal. Fang, Zhou, Wu, and Qi [15] further noted that networking facilitates dynamic learning, enabling firms to adapt and renew their knowledge bases in response to competitive pressures. Extant management literature provides substantial support for the application of Dynamic Capabilities Theory in explaining firm performance, particularly through its emphasis on intangible resources and organizational capabilities that enable firms to respond effectively to changing business environments [26, 28, 33, 34].

4.2. The Balanced Scorecard Model

Kaplan and Norton introduced the Balanced Scorecard (BSC) as a strategic management framework that integrates financial and non-financial performance measures to provide a comprehensive assessment of organizational performance. The framework was developed to address the limitations of relying predominantly on conventional financial measures by incorporating four complementary perspectives: financial performance, customer outcomes, internal business processes, and learning and growth. This balanced approach enables organizations to assess both current performance and the capabilities required to achieve future strategic objectives. The BSC has subsequently been adopted as a strategic performance management system across various organizational contexts [50]. Subsequent research has further demonstrated its usefulness in benchmarking and continuous improvement [45], as well as in organizational learning and value creation [41].

Firm performance, operationalized using the Balanced Scorecard (BSC), was used as the dependent variable in this study. The BSC is relevant to assessing the performance of Deposit-Taking Savings and Credit Cooperative Societies (DT-SACCOs) because it provides a multidimensional approach that balances financial outcomes with member and stakeholder value. Isichei, Isichei, and Moruku [16] emphasized that the BSC assists SACCOs in aligning and refining their strategies to enhance competitiveness while addressing the needs of diverse stakeholders. Similarly, Masoud, Omwenga, and Ndururi [23] further established that innovation- and process-oriented BSC measures are closely aligned with SACCO objectives, contributing to member confidence and organizational sustainability. Accordingly, the BSC provides an appropriate framework for assessing performance of DT-SACCOs by linking strategic objectives to performance outcomes across financial, customer, internal process, and learning and growth dimensions.

5. Empirical Review

Lee and Seo [22] examined the relationship between open innovation, network development capability, and corporate performance among small and medium-sized enterprises. The study adopted a quantitative approach and collected data from employees of SMEs, which were analysed using Structural Equation Modelling through SmartPLS and SPSS. The findings showed that network development capability had a positive and significant effect on corporate performance. The study further established that network development capability played a mediating role in the relationship between open innovation and corporate performance. These findings suggest that firms can improve their performance by deliberately developing and managing networks that facilitate access to external information, knowledge, and other resources. However, the study focused on SMEs and examined network development capability mainly within the context of open innovation. The present study extended this line of inquiry to deposit-taking SACCOs in Nairobi City County, Kenya, with specific attention to how network development capability influences firm performance within the financial cooperative sector.

Kimaru, Ngugi, and Mugambi [19] examined networking capability and sustainable competitive advantage among small and medium-sized food manufacturing enterprises in Kenya. The study assessed the extent to which networking capability contributed to the ability of firms to sustain competitive advantage in a challenging business environment. The findings indicated that networking capability contributes to sustainable competitive advantage, highlighting the importance of firms developing and maintaining relationships that provide access to resources, information, and opportunities. However, the study focused on small and medium-sized enterprises in the food manufacturing sector and examined sustainable competitive advantage rather than direct measures of firm performance. The present study addressed this contextual and conceptual gap by focusing on deposit-taking Savings and Credit Cooperative Societies (DT-SACCOs) operating in the financial cooperative sector in Nairobi City County, Kenya, and examining the predictive effect of network development capability on firm performance, measured through customer satisfaction, operational efficiency, and stakeholder confidence.

Bhaktiar, Mursitama, So, Abidinagoro, and Dwidienawati [9] conducted a quantitative study examining the influence of networking development capability and learning capability, both conceptualized as dynamic capabilities, on business model innovation and, subsequently, firm performance in Indonesia. The study surveyed 234 respondents and analyzed the data using SmartPLS version 3.3.3. The findings revealed that both networking development capability and learning capability had significant positive effects on business model innovation, which, in turn, enhanced firm performance. The study also established the mediating role of business model innovation in the relationship between dynamic capabilities and firm performance. However, the study focused on small

and medium-sized enterprises (SMEs), limiting the applicability of its findings to cooperative financial institutions. The present study addressed this contextual gap by examining network development capability among DT-SACCOs and assessing its predictive power on firm performance using indicators relevant to the SACCO sector, including member growth, operational efficiency, customer satisfaction, and stakeholder confidence.

6. Research Methodology

The study adopted an appropriate research methodology and employed a range of methods to facilitate the collection, organization, analysis, presentation, and interpretation of data.

Research design refers to the overall plan that guides the collection, measurement, and analysis of data in a study [13, 48]. It provides a framework for systematically addressing research questions and testing research hypotheses. This study adopted an explanatory research design to examine the predictive power of network development capability on the performance of Deposit-Taking Savings and Credit Cooperative Societies (DT-SACCOs) in Nairobi City County, Kenya. The design was considered appropriate because it facilitates the examination of relationships among variables and the testing of theoretically derived hypotheses [12, 28]. Explanatory research designs have also been applied in social science research [18, 20, 25, 31, 36]. The design was therefore considered suitable for establishing the extent to which network development capability predicts firm performance among DT-SACCOs.

Target population refers to the entire group of individuals, organizations, or elements that possess characteristics relevant to a study [21]. The target population for this study comprised 41 Deposit-Taking SACCOs (DT-SACCOs) operating within Nairobi City County. The unit of analysis was the DT-SACCO, while the unit of observation comprised senior- and middle-level management employees. These respondents were considered appropriate because of their involvement in strategic planning, partnership development, implementation of networking activities, and monitoring of organizational perfor-

mance. Their roles positioned them to provide relevant information on network development capability and firm performance within their respective DT-SACCOs.

Table 1. Distribution of Target Population.

Category	Frequency	Percentage
Senior Level Management	93	20%
Middle Level Management	382	80%
Total	475	100%

Source: SASRA Report (2025)

The senior management category comprised general managers with overall responsibility for the strategic direction and management of their respective SACCOs. Middle-level management comprised departmental heads, including finance managers, credit managers, human resource managers, branch managers, marketing managers, and risk managers. The inclusion of both management levels provided complementary strategic and operational perspectives on network development capability and firm performance.

The sample size was determined using Yamane's [56] formula:

$$n = \frac{N}{1+N(e)^2}$$

Where; N =target proportion, n = Sample size, and e = Level of precision

Thus;

$$= \frac{475}{1+475(0.05)^2} = 215$$

A proportionate stratified sampling technique was used to ensure representation of both management categories.

Table 2. Sample Size Distribution.

Category	Population (N)	Sampling Factor (p)	Sample Size (n)	Percentage
Senior Level Management	93	0.4526	43	20%
Middle Level Management	382	0.4526	172	80%
Total	475	-	215	100%

Source: Researcher (2025)

The use of proportionate stratified sampling ensured that respondents were selected from each management category according to its proportion in the population, thereby ensuring adequate representation of both senior- and middle-level management.

Primary data were collected using a structured questionnaire comprising closed-ended questions. The closed-ended items were measured using a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The questionnaire comprised three sections: Section A captured respondents' demographic information, Section B measured Network Development Capability, and Section C measured Firm Performance. The questionnaire was considered appropriate because it facilitated standardized data collection while allowing respondents to provide additional views and insights into the study variables through the open-ended questions.

A pilot study was conducted at Ndetika Rural SACCO in Kiambu County, which shares characteristics similar to those of the target DT-SACCOs. According to Mugenda and Mugenda [29], a pilot sample of approximately 10% of the study sample is adequate for pre-testing a research instrument. Accordingly, 22 management employees participated in the pilot study. The pilot study was undertaken to identify ambiguities, improve the clarity and relevance of the questionnaire items, and assess the reliability and validity of the research instrument before the main data collection.

Validity refers to the extent to which a research instrument

measures what it is intended to measure [43]. In this study, validity was assessed through face, content, construct, and criterion validity. Face validity was established through expert review by the research supervisor and academic staff from the Department of Business Administration. Their feedback was used to improve the clarity, relevance, and comprehensibility of the questionnaire items. Content validity was achieved by aligning the questionnaire items with relevant literature on network development capability and firm performance, thereby ensuring adequate coverage of the dimensions of the study variables. Construct validity was established by linking the measurement items to the theoretical foundations and empirical studies underpinning network development capability and firm performance. Criterion validity was enhanced by comparing the measurement indicators with those used and validated in previous empirical studies examining related constructs. Collectively, these procedures helped establish the appropriateness of the questionnaire for measuring the study variables.

Reliability refers to the consistency with which a research instrument measures study variables under similar conditions [51]. In this study, Cronbach's alpha coefficient was used to assess the internal consistency of the questionnaire items. A Cronbach's alpha coefficient of 0.70 or higher was considered acceptable, indicating satisfactory internal consistency of the measurement scales [35].

Table 3. Reliability Test Results.

Variable	No. of Items	Cronbach's Alpha (α)	Interpretation
Network Development Capability	9	0.822	Reliable
Firm Performance	9	0.801	Reliable

Source: Pilot Data (2026)

The findings indicate that all study variables recorded Cronbach's alpha coefficients above the recommended threshold of 0.70, demonstrating satisfactory internal consistency and confirming the reliability of the research instrument.

The researcher obtained an introduction letter from Kenyatta University and subsequently secured a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). Permission was then sought from the management of the selected DT-SACCOs before commencing data collection. The questionnaires were administered using the drop-and-pick-later method, allowing respondents adequate time to complete them. The completed questionnaires were subsequently collected for analysis. Follow-up visits and telephone reminders were made to facilitate timely completion and enhance the response rate.

The collected data were checked for completeness, coded,

and entered into the Statistical Package for the Social Sciences (SPSS) version 27 for analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the data. Inferential analysis was conducted using simple linear regression to assess the predictive power of network development capability on firm performance among DT-SACCOs. The analysis provided estimates of the strength and statistical significance of the predictive relationship between the study variables.

The regression model was specified as follows:

$$\text{Firm Performance} = \beta_0 + \beta_1 \text{Network Development Capability} + \varepsilon$$

Where: β_0 = Constant, β_1 = Regression Coefficient, and ε = Error Term

The study tested statistical significance at a 95% confidence level and a 5% level of significance ($\alpha = 0.05$). The findings were presented using tables and figures to facilitate clear interpretation and comparison of results. Qualitative responses obtained from the open-ended questions were analyzed using content analysis and presented narratively to complement the quantitative findings.

7. Research Findings and Discussions

The survey data were analyzed in accordance with the adopted methodological approach, and the resulting findings

were interpreted and discussed accordingly.

7.1. Response Rate

The study's response rate is presented in the table below. The target respondents comprised senior-level management and middle-level managers serving as heads of departments. These respondents were administered questionnaires to obtain their views on network development capability and firm performance. The table provides an overview of the questionnaires distributed, completed, and returned, as well as the corresponding response rate.

Table 4. Response Rate.

Category	Questionnaire Distributed	Questionnaire Filled	Proportion
Senior Level Management	43	31	72%
Middle Level Management	172	150	87%
Total	215	181	84%

Source: Field Data (2026)

A total of 215 questionnaires were issued to senior- and middle-level managers of the sampled SACCOs, of which 181 were duly completed and returned, representing a response rate of 84.2%. Mugenda and Mugenda [30] indicate that a response rate of 70% or higher is adequate for data analysis and reporting. The response rate achieved in this study was therefore considered satisfactory and adequate to support credible inferences about the target population. The relatively high response rate was attributed to effective follow-up by the researcher and engagement with designated contact persons in the SACCOs, which facilitated respondents' participation and contributed to the timely return of completed questionnaires.

7.2. Biographical Characteristics of the Respondents

Table 5 presents the distribution of the biographical characteristics of the respondents. The characteristics examined include gender, years of service in the current position, and highest level of education. These characteristics provide important background information about the respondents and facilitate an understanding of the composition and diversity of the sample. The frequencies and percentages are based on the 181 valid responses obtained in the study.

Table 5. Descriptive Statistics on Biographical Attributes.

Variable	Category	Frequency	Percent
Gender	Male	109	60.2
	Female	72	39.8
	Total	181	100.0
Years Worked	Less than 5 years	42	23.2
	5–10 years	58	32.0
	10–15 years	47	26.0
	More than 15 years	34	18.8
	Total	181	100.0

Variable	Category	Frequency	Percent
Education Level	Postgraduate	39	21.5
	Undergraduate	76	42.0
	Diploma	41	22.7
	Certificate	18	9.9
	Others	7	3.9
	Total	181	100.0

Source: Field Data (2026)

The gender distribution of the respondents indicated that both male and female participants were represented in the study. The findings show that male respondents constituted 60.2% of the sample, while female respondents accounted for 39.8%. The distribution indicates representation of both genders among the management respondents, although males constituted the majority. The representation of female respondents also reflects their participation in management positions within the sampled SACCOs, providing diverse perspectives on organizational decision-making.

In terms of years of service in their current positions, 23.2% of the respondents had served for less than five years, 32.0% had served for five to ten years, 26.0% had served for ten to fifteen years, while 18.8% had served for more than fifteen years. The findings indicate that the majority of respondents (58.0%) had served in their current positions for between five and fifteen years, suggesting substantial experience within their respective SACCOs. This level of experience implies that most respondents had sufficient familiarity with their organizations' operations and practices to provide informed views on network development capability and firm performance.

The findings on the highest level of education attained by

the respondents indicate that 42.0% held undergraduate degrees, 22.7% held diplomas, 21.5% had postgraduate qualifications, 9.9% held certificates, while 3.9% had other qualifications. The findings indicate that the respondents were generally well educated, with 63.5% holding undergraduate or postgraduate qualifications. This level of educational attainment suggests that a substantial proportion of the respondents possessed relevant academic and professional preparation to provide informed views on network development capability and firm performance. Combined with their work experience, the educational qualifications of the respondents enhance the credibility and relevance of the data obtained for the study.

7.3. Network Development Capability

Networking development capability focuses on the extent to which SACCOs establish, maintain, and strengthen relationships with external partners through trust building, collaborative engagement, formalization of partnerships, and strategic alignment. Data gathered on networking development capability were analyzed into mean, standard deviation and coefficient of variation as shown in Table 6.

Table 6. Network Development Capability.

Statements	M	SD	CV (%)
Partnership development emphasizes trust-building as a foundational element.	3.742	0.511	13.66
The SACCO implements projects through collaborative arrangements with partners.	3.688	0.547	14.83
The SACCO formalizes partnership agreements with clear expectations.	3.774	0.498	13.20
The SACCO directs efforts toward dependable network relationships.	3.856	0.522	13.54
Clear processes exist for maintaining partnerships.	3.799	0.533	14.03
The SACCO conducts evaluations to strengthen its partnership network.	3.725	0.520	13.96
Collaborative initiatives foster mutual trust among partners.	3.811	0.497	13.04
Partnership development aligns with SACCO's strategic goals.	3.888	0.505	13.00
The SACCO maintains open dialogue to strengthen relations.	3.799	0.511	13.45

Statements	M	SD	CV (%)
Aggregate Score	3.789	0.516	13.62

Source: Field Data (2026)

Table 6 presents findings on the implementation of network development practices among DT-SACCOs in Nairobi City County. Respondents generally agreed that SACCOs actively establish and sustain partnerships, with an overall mean of 3.789 (SD = 0.516; CV = 13.62%), indicating strong and consistent implementation. Partnership development aligned with strategic goals recorded the highest mean (M = 3.888; SD = 0.505; CV = 13.00%), suggesting that partnerships are purposefully linked to organizational objectives such as market penetration, financial sustainability, and member satisfaction. Reliable network relationships (M = 3.856), joint trust-building efforts (M = 3.811), formal partnership agreements (M = 3.774), open dialogue, and clear partnership management processes (M = 3.799 each) were also highly rated. These findings are consistent with studies emphasizing strategic alignment, trust, collaboration, and structured networking as important drivers of organizational performance [9, 22].

However, implementing projects through collaborative arrangements recorded the lowest mean score (M = 3.688; SD = 0.547; CV = 14.83%), indicating that translating established relationships into joint projects remains relatively less developed. The higher coefficient of variation also suggests greater differences in respondents' perceptions, potentially reflecting variations in SACCO size, resource availability, and project management capabilities. Open-ended responses indicated that resource constraints and differences in partners' priorities

may hinder collaborative project implementation. Similarly, partnership evaluation (M = 3.725; SD = 0.520; CV = 13.96%) and trust-building practices (M = 3.742; SD = 0.511; CV = 13.66%) were positively rated, indicating recognition of the importance of continuous assessment, transparency, accountability, and communication in sustaining effective partnerships.

Overall, the findings indicate that DT-SACCOs in Nairobi City County possess a relatively strong network development capability, particularly in strategic alignment, relationship reliability, and trust building. Nevertheless, greater attention is required to translate established partnerships into concrete collaborative projects. Strengthening joint initiatives, resource sharing, partnership evaluation, and collaborative project management could therefore enable SACCOs to derive greater value from their networks and enhance organizational performance and long-term sustainability.

7.4. Firm Performance

The construct of firm performance focuses on the extent to which SACCOs achieve customer satisfaction, stakeholder confidence, operational efficiency, and competitiveness. Data gathered on firm performance were analyzed into mean, standard deviation and coefficient of variation as shown in Table 7.

Table 7. Firm Performance.

Statements	M	SD	CV
The SACCO achieves high levels of customer satisfaction.	3.511	0.498	14.18
Stakeholder confidence in the SACCO continues to grow.	3.422	0.522	15.26
Process efficiency has improved in operations.	3.388	0.547	16.15
The SACCO consistently meets its performance targets.	3.477	0.511	14.70
Membership numbers show steady growth over time.	3.599	0.533	14.82
Customer complaints are addressed effectively.	3.422	0.520	15.20
SACCO's services remain competitive in the market.	3.511	0.497	14.16
Operational processes have become more cost-effective.	3.388	0.505	14.91
Member feedback is used to improve processes.	3.477	0.511	14.70
Aggregate Score	3.466	0.516	14.89

Source: Field Data (2026)

Table 7 presents the descriptive statistics for firm performance among DT-SACCOs in Nairobi City County. The overall mean score of 3.466 (SD = 0.516; CV = 14.89%) indicates a moderate level of performance. Membership growth recorded the highest mean (M = 3.599; SD = 0.533), followed by customer satisfaction and service competitiveness (M = 3.511 each), suggesting relatively positive outcomes in market reach and responsiveness to member needs. These findings are consistent with Cheruon et al. [11], who found that effective communication and networking contribute to client retention and organizational flexibility.

In contrast, process efficiency and cost-effectiveness of operations recorded the lowest mean scores (M = 3.388), indicating that operational efficiency remains a key area for improvement. Stakeholder confidence and customer complaint management also recorded moderate scores (M = 3.422 each). Open-ended responses indicated that SACCOs employ member interaction forums, digital service platforms, staff training,

and member feedback to improve performance. These practices are supported by studies emphasizing communication, employee engagement, transparency, and trust as contributors to organizational performance [3, 6, 27, 57].

Generally, the findings indicate that DT-SACCOs demonstrate moderate firm performance, with stronger outcomes in membership growth, customer satisfaction, and market competitiveness. However, operational efficiency, stakeholder confidence, and customer complaint management require further strengthening. Improving communication, stakeholder engagement, member feedback mechanisms, and operational processes could therefore support sustained growth, competitiveness, and long-term organizational performance.

8. Inferential Statistics

Firm performance was regressed on network development capability, and the results are presented in Table 8.

Table 8. Results of Linear Regression Analysis.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.901 ^a	.812	.797	.01421

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.205	4	2.801	13871.364	.000 ^b
	Residual	.036	176	.000		
	Total	11.241	180			

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	β	Std. Error	Beta			
1	(Constant)	.057	.023		2.486	.014
	Network Development	.462	.019	.541	24.187	.001

Source: Field Observations (2026)

The model summary demonstrates a very strong relationship between network development capability and firm performance among SACCOs in Nairobi City County. The correlation coefficient (R = 0.901) indicates a strong positive association, suggesting that higher levels of network development capability are associated with higher levels of firm performance. The coefficient of determination (Adjusted R² = 0.797) indicates that network development capability explains

79.7 percent of the variation in firm performance. This represents a substantial proportion of the explained variance and underscores the strong explanatory power of the regression model.

The ANOVA output presented provide evidence of the overall statistical significance of the regression model linking network development capability to firm performance among SACCOs in Nairobi City County. The F-statistic of 13,871.364, with a significance value of 0.000 (p < 0.001),

indicates that the regression model is statistically significant. This finding suggests that network development capability significantly predicts firm performance, implying that variations in network development capability are associated with corresponding variations in SACCO performance outcomes. Moreover, the relatively small residual variation indicates that the model accounts for a substantial proportion of the observed variation in firm performance, further supporting its overall goodness of fit. The model that was estimated from this regression analysis is thus presented.

Firm Performance = 0.057 + 0.462 *Network Development Capability*

Network development capability had a positive and statistically significant relationship with firm performance, as indicated by a beta coefficient of 0.462 and a p-value of 0.001. This implies that a one-unit increase in network development capability is associated with a 0.462-unit increase in firm performance, holding other factors constant. The finding suggests that SACCOs with well-developed networking processes, including alliance management, digital integration, and collaborative structures, are better positioned to enhance operational efficiency, customer satisfaction, and stakeholder confidence.

The finding is consistent with Bhaktiar et al. [9], who found that networking development and learning capability significantly and positively influenced business model innovation, which subsequently enhanced firm performance among firms in Indonesia. Similarly, Arasti, Garousi Mokhtarzadeh and Jafarpanah [5] established that network development capability contributed to sustainability and market access in rural e-commerce platforms. The present finding therefore reinforces the view that effective network development can contribute to improved organizational outcomes, including member growth, operational efficiency, and other dimensions of firm performance among SACCOs. The findings can be interpreted from the perspectives of Dynamic Capabilities Theory, which position network development capability as a strategic enabler of organizational adaptability and performance. Effective networking can facilitate learning, coordination, and organizational responsiveness, enabling SACCOs to access external knowledge, strengthen partnerships, and improve service delivery and innovation.

9. Conclusion

The objective of the study was to establish the predictive power of network development capability on firm performance. The findings revealed that network development capability had a positive and statistically significant predictive relationship with firm performance. The study therefore concludes that SACCOs that emphasize trust building, collaborative efforts, formalized partnership agreements, and strategic alignment are better positioned to enhance their organizational performance. Effective network development enables SACCOs to strengthen relationships with partners and stakeholders, expand their reach, and improve service delivery. The findings

further suggest that network development capability contributes to improved organizational outcomes, including member growth, loan recovery, and operational efficiency.

10. Recommendations for Policy and Practical

With regard to network development capability, SACCOs should prioritize trust building, reliability, and strategic alignment in their partnerships. SACCO directors and management should formalize partnership agreements with clearly defined expectations, maintain open communication, and conduct regular evaluations to strengthen and sustain partner relationships. Greater emphasis should also be placed on joint projects and collaborative initiatives that generate mutual benefits and strengthen trust among partners. Policymakers should encourage collaborative initiatives that enable SACCOs to establish and sustain long-term partnerships aligned with broader financial inclusion objectives. These measures would enable SACCOs not only to maintain effective networks but also to leverage them to enhance operational efficiency, service delivery, and member satisfaction.

Abbreviations

BSC	Balanced Scorecard
DTS	Deposit-Taking SACCOs
DT-SACCOs	Deposit-Taking Savings and Credit Cooperative Organizations
NACOSTI	National Commission for Science, Technology and Innovation
SACCOs	Savings and Credit Cooperative Organizations
SASRA	SACCO Societies Regulatory Authority
SMEs	Small and Medium Enterprises

Author Contributions

Veronica Wanjiru Ruo: Conceptualization, Funding acquisition, Methodology, Writing – original draft
Godfrey Muigai Kinyua: Supervision, Validation

Conflicts of Interest

The authors declare no conflicts of interest.

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