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Original Article

Digital Capability, Knowledge Capital, and Governance in East African SACCOs: A Systematic Review of Drivers of Financial Inclusion

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ABSTRACT

Savings and Credit Cooperative Organisations (SACCOs) remain central to financial inclusion in East Africa, particularly for rural and low-income populations excluded from commercial banking. However, despite their growth, SACCO performance across Uganda, Kenya, and Tanzania remains uneven due to technological, governance, and knowledge constraints. This study undertakes a theory-driven systematic review of SACCO performance between 2020 and 2025 to examine how digital capability, financial knowledge, governance quality, and community embeddedness shape inclusion outcomes. Grounded in Institutional Theory, Resource-Based View, Agency Theory, and Technology Adoption frameworks, the study synthesises peer-reviewed literature, regulatory reports (Kenya Sacco Societies Regulatory Authority (SASRA), Tanzania Cooperative Development Commission (TCDC), Uganda Microfinance Regulatory Authority (UMRA)), and global datasets (Global Findex, GSMA, WOCCU). Using structured thematic coding supported by qualitative synthesis procedures, the review identifies four interdependent drivers of SACCO sustainability: digital integration capacity, member financial literacy, governance and oversight quality, and social capital density. Findings indicate that digital adoption improves outreach and transaction efficiency, but its impact depends critically on member knowledge and regulatory capacity. Weak governance and agency problems remain primary predictors of SACCO failure, particularly in poorly supervised environments. Community networks enhance repayment discipline and savings culture, but cannot substitute for institutional accountability. The study contributes by integrating fragmented SACCO literature into a coherent systems framework and proposing a SACCO Institutional–Digital Capability Model for future empirical testing. Policy implications emphasise coordinated investments in digital infrastructure, governance reform, financial capability development, and predictive oversight systems.

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INTRODUCTION

Financial inclusion has become a central pillar in global development policy, framed as a mechanism for poverty reduction, enterprise growth, gender equity, and macroeconomic resilience. According to the World Bank's Global Findex Database, account ownership in developing economies increased significantly over the past decade, driven largely by digital financial services and mobile money innovations (Demirgüç-Kunt *et al.,* 2022). In Sub-Saharan Africa, mobile money has transformed transactional ecosystems, positioning the region as a global leader in digital finance adoption (Klapper *et al*., 2025). Yet, despite these gains in formal account access, structural inequalities in usage, financial capability, and institutional quality persist.

Within this landscape, Savings and Credit Cooperative Organisations (SACCOs) have emerged as critical grassroots financial intermediaries. Unlike commercial banks, SACCOs operate on cooperative principles of democratic governance, voluntary membership, and mutual assistance (Wanyama, 2009). In East Africa, particularly in Kenya, Uganda, and Tanzania, SACCOs serve millions of members excluded from traditional banking systems. Kenya's SACCO sector alone accounts for a substantial proportion of domestic savings and operates under formal regulatory oversight through the Sacco Societies Regulatory Authority (SASRA, 2023). In Uganda and Tanzania, SACCOs play vital roles in rural credit markets, often complementing state-led financial inclusion initiatives (Omona, 2021; Magashi *et al.,* 2023).

Despite their institutional relevance, SACCO performance across East Africa remains uneven. While some cooperatives demonstrate strong savings mobilisation, loan recovery discipline, and digital integration, others face persistent governance failures, technological stagnation, and liquidity crises (Magashi *et al*., 2024; Mumanyi, 2014). Empirical evidence suggests that SACCO collapse is frequently associated with weak leadership, poor financial oversight, and inadequate member knowledge of financial principles (Magashi *et al.,* 2024; Omwoyo, 2022). These disparities raise a fundamental question: what explains the variation in SACCO sustainability and financial inclusion outcomes across otherwise similar socio-economic environments?

Existing research provides partial answers but remains fragmented. A stream of literature emphasises technology adoption, demonstrating that mobile platforms reduce transaction costs and expand outreach (Ogello, 2015; Jack & Suri, 2014). Another body of work highlights governance and regulatory oversight, identifying agency conflicts and weak accountability structures as major predictors of cooperative failure (Kyazze *et al.,* 2020; Magashi *et al.,* 2023). A third line of inquiry focuses on financial literacy and member capability, linking knowledge deficits to poor repayment behaviour and savings discipline (Atkinson & Messy, 2012; Namisango, 2025).

However, these strands of research are rarely integrated within a coherent theoretical framework. Technology studies often rely on the Technology Acceptance Model (TAM) constructs without connecting adoption dynamics to institutional governance structures (Davis, 1989; Venkatesh & Davis, 2000). Governance analyses frequently draw on agency theory but neglect how knowledge capacity and digital systems mediate principal–agent relationships. Similarly, financial literacy research documents behavioural effects but does not systematically embed these findings within broader cooperative resource configurations. As a result, the literature lacks a systems-level explanation of how digital capability, knowledge capital, governance structures, and community networks interact to shape SACCO performance.

The theoretical gap, therefore, lies in the absence of an integrated framework linking organisational resources, institutional governance, and digital transformation within cooperative finance. The Resource-Based View (RBV) suggests that sustainable organisational performance depends on valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). In SACCOs, these resources include not only financial capital but also leadership competence, member trust, digital infrastructure, and knowledge capacity. Yet RBV alone cannot explain governance breakdowns without incorporating Agency Theory, which highlights conflicts between members (principals) and elected managers (agents) (Kyazze *et al.,* 2020). Institutional Theory further underscores how regulatory quality and oversight environments shape cooperative behaviour and compliance patterns (Omona, 2021).

Additionally, digital finance adoption literature indicates that perceived usefulness and ease of use influence technology uptake (Davis, 1989), but adoption does not guarantee institutional transformation. Evidence from Tanzania demonstrates that digital tools introduced without adequate governance and training frameworks fail to prevent SACCO collapse (Magashi *et al.,* 2024). These findings suggest that technology, knowledge, and governance must be conceptualised as interdependent capabilities rather than isolated drivers.

Empirically, a second gap emerges in the methodological approach of prior studies. Much of the SACCO literature in East Africa consists of single-country case studies, master's theses, or narrowly focused sectoral analyses (Mumanyi, 2014; Namisango, 2025; Omwoyo, 2022). While valuable, these studies rarely engage in cross-country synthesis or comparative institutional analysis. Regulatory reports (e.g., SASRA, 2023) provide descriptive statistics but do not theorise causal mechanisms. Consequently, policymakers and scholars lack a consolidated understanding of the structural drivers that differentiate high-performing SACCO ecosystems from fragile ones.

This study addresses both the theoretical and empirical gaps by undertaking a systematic, theory-driven review of SACCO performance literature in Uganda, Kenya, and Tanzania between 2020 and 2025. Rather than presenting a flawed quantitative meta-analysis, the study synthesises peer-reviewed research, regulatory reports, and global datasets within an integrated conceptual framework drawing on Resource-Based View, Agency Theory, Institutional Theory, and Technology Adoption models.

The study is guided by three research questions:

- How does digital capability influence SACCO outreach and operational sustainability?
- What role does member financial knowledge play in shaping repayment discipline and savings mobilisation?
- How do governance structures and institutional oversight moderate the relationship between technology adoption and financial inclusion outcomes?

By answering these questions, the paper contributes in three ways. First, it develops a systems-level model linking digital integration, knowledge capital, governance quality, and community embeddedness. Second, it provides a structured cross-country synthesis of SACCO performance drivers in East Africa. Third, it offers policy-relevant insights grounded in theoretical integration rather than descriptive aggregation.

In doing so, the study advances the understanding of cooperative finance beyond fragmented thematic analyses and toward a coherent institutional–digital capability framework capable of informing both scholarship and policy reform. SACCOs remain central to inclusive development in East Africa, but their transformative potential depends not merely on capital availability but on the coordinated alignment of digital systems, knowledge capacity, governance integrity, and community trust.

THEORETICAL FRAMEWORK

Introduction: Toward an Integrated Institutional-Digital Capability Lens

Understanding the performance and sustainability of Savings and Credit Cooperative Organisations (SACCOs) in East Africa requires a multi-theoretical perspective. SACCOs are not merely financial intermediaries; they are socio-technical institutions embedded in community networks, governed by cooperative principles, and increasingly shaped by digital transformation. However, prior research has treated these dimensions separately - technology adoption, governance, and financial literacy - without integrating them into a coherent analytical framework.

This study draws on four complementary theoretical traditions: Resource-Based View (RBV), Agency Theory, Institutional Theory, and Technology Adoption Theory. Together, these perspectives provide an integrated explanation of how organisational resources, governance structures, institutional environments, and digital capabilities interact to shape financial inclusion outcomes. The section first outlines each theoretical lens, then identifies specific gaps in existing SACCO research, and finally presents the integrated conceptual contribution of this study.

Resource-Based View (RBV): Internal Capabilities and Cooperative Sustainability

The Resource-Based View posits that sustained organisational performance derives from internal resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). Unlike industrial organisation theory, which emphasises market structure, RBV centres on firm-specific capabilities. In cooperative finance contexts, such resources include leadership competence, member trust, governance routines, financial literacy levels, and digital infrastructure.

Empirical evidence in East Africa suggests that SACCOs with stronger managerial capacity and innovation orientation demonstrate greater resilience and outreach. Nassuna *et al.* (2024) found that SACCOs in Uganda, leveraging entrepreneurial leadership and team-based decision-making, achieved superior growth outcomes. Similarly, Mumanyi (2014) identified internal capacity deficits as major constraints to SACCO sustainability in Kenya’s devolved government system.

However, the theoretical application of RBV to SACCOs has been limited. Most studies document performance differences descriptively without theorising how intangible knowledge assets and digital capabilities constitute strategic resources. Moreover, RBV alone cannot explain why organisations with similar resource bases perform differently under weak regulatory environments.

Theoretical gap: Existing SACCO studies acknowledge internal capabilities but fail to conceptualise digital infrastructure, financial literacy, and governance integrity as interacting strategic resources within a unified capability framework.

Contribution of this study: This research extends RBV by integrating digital capability and knowledge capital as core cooperative resources and situating them within broader institutional constraints.

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Agency Theory: Governance, Accountability, and Principal-Agent Problems

Agency Theory explains conflicts that arise when principals delegate authority to agents whose interests may diverge (Jensen & Meckling, 1976). In SACCOs, members act as principals who elect boards and managers to oversee cooperative operations. Agency problems emerge when managers pursue personal or political interests at the expense of members' financial welfare.

Governance failures remain a leading cause of SACCO collapse in East Africa. Magashi *et al.* (2023, 2024) identify leadership weakness and poor oversight as significant predictors of failure in Tanzania. Omona (2021) documents how politically influenced SACCO formation in Uganda undermined accountability structures. Similarly, Kyazze *et al.* (2020) emphasise that weak internal controls and inadequate audit mechanisms compromise cooperative governance.

Yet, agency theory has rarely been integrated with technology and knowledge frameworks in SACCO research. While governance studies identify corruption or mismanagement, they seldom explore how digital record systems, transparency technologies, and member financial literacy mitigate agency costs.

Theoretical gap: Governance research treats agency problems as structural but does not sufficiently consider how digital systems and knowledge capacity alter principal–agent dynamics.

Contribution of this study: This research reconceptualises digital transparency tools and member financial literacy as mechanisms that reduce information asymmetry and agency costs within cooperative governance.

Institutional Theory: Regulatory Environments and System Stability

Institutional Theory posits that organisational behaviour is shaped by formal rules, regulatory systems, and normative pressures (Scott, 2008). SACCO performance varies significantly across regulatory environments. Kenya's SACCO sector benefits from structured oversight under SASRA (SASRA, 2023), while Uganda's regulatory landscape remains fragmented (Omona, 2021). Tanzania's SACCO sector has undergone reform efforts following widespread failures (Magashi *et al.,* 2024).

Institutional quality influences not only compliance but also innovation adoption. Strong supervisory regimes encourage standardised reporting, capital adequacy, and risk management. Weak institutional frameworks allow governance failures to persist.

However, most SACCO research treats institutional environments descriptively, without linking regulatory capacity to digital integration and knowledge systems. Institutional theory is often invoked implicitly rather than analytically.

Theoretical gap: The interaction between institutional oversight, digital transformation, and cooperative resource capabilities remains under-theorised.

Contribution of this study: This research integrates institutional oversight as a moderating factor influencing how internal capabilities and digital adoption translate into financial inclusion outcomes.

Technology Adoption Theory: Digital Capability and Financial Inclusion

The Technology Acceptance Model (TAM) posits that perceived usefulness and perceived ease of use drive technology adoption (Davis, 1989). Extensions such as Unified Theory of Acceptance and Use of Technology (UTAUT) incorporate social influence and facilitating conditions (Venkatesh & Davis, 2000). In SACCO contexts, mobile banking, SMS alerts, and digital loan management systems enhance efficiency and outreach (Ogello, 2015; Jack & Suri, 2014).

Evidence from Global Findex reports demonstrates that mobile money has expanded financial access across Sub-Saharan Africa (Demirgüç-Kunt *et al.,* 2022; Klapper *et al.,* 2025). However, adoption does not automatically guarantee sustainability. Tanzania's SACCO failures despite technological availability illustrate that digital tools require complementary governance and knowledge systems (Magashi *et al.,* 2024).

Technology adoption research often focuses on individual behavioural intention rather than organisational transformation. In cooperative settings, digital tools must integrate with governance frameworks and financial literacy programs to generate sustainable outcomes.

Theoretical gap: Technology adoption studies in SACCOs overlook institutional alignment and knowledge capacity as mediating variables.

Contribution of this study: This research positions digital capability not as an isolated adoption outcome but as part of an integrated institutional–knowledge capability ecosystem.

Integrated Conceptual Contribution

Drawing from these four theoretical traditions, this study proposes an integrated **SACCO Institutional-Digital Capability Model**. The model posits that SACCO sustainability and financial inclusion outcomes are determined by four interacting domains:

- **Digital Capability** (technology infrastructure, mobile integration, data systems)
- **Knowledge Capital** (member financial literacy, managerial competence)
- **Governance Integrity** (agency cost mitigation, transparency mechanisms)
- **Institutional Oversight** (regulatory supervision, compliance frameworks)

These domains operate interdependently. Digital capability enhances efficiency but depends on knowledge capital for effective use. Governance integrity mitigates agency costs but is strengthened by digital transparency. Institutional oversight moderates and stabilises all three domains.

This integrative framework advances SACCO scholarship by moving beyond single-theory explanations and offering a systems-level account of cooperative financial inclusion in East Africa.

METHODOLOGY

Research Design

This study adopts a theory-driven systematic review design to examine the drivers of sustainability and financial inclusion outcomes among Savings and Credit Cooperative Organisations (SACCOs) in East Africa. The earlier framing of the study as a quantitative meta-analysis has been reconsidered in light of methodological standards. A formal meta-analysis requires standardised effect size metrics, comparable quantitative outcomes, pooled statistical estimates, heterogeneity diagnostics (Q-statistics, I^2, τ^2), and publication bias assessments (Borenstein *et al.,* 2009). The existing SACCO literature across Uganda, Kenya, and Tanzania is methodologically heterogeneous, encompassing qualitative case studies, regression-based analyses, regulatory reports, and master's theses with diverse outcome variables. Such variability precludes meaningful statistical aggregation.

Accordingly, a systematic review approach is more appropriate. Systematic reviews are designed to synthesise heterogeneous bodies of literature through transparent identification, screening, and structured conceptual integration (Tranfield *et al.,* 2003). This study, therefore, follows established review protocols emphasising replicability, transparency, and theoretical anchoring (Moher *et al.,* 2009). The purpose is not statistical pooling but analytical synthesis within the integrated Institutional-Digital Capability framework developed in Section 2.

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Literature Search Strategy

The literature search was conducted across Scopus, Web of Science Core Collection, ScienceDirect, and Emerald Insight databases. The search strategy combined terms, including "SACCO," "Savings and Credit Cooperative," "financial inclusion," "digital finance," "mobile money," "governance," "financial literacy," and country identifiers such as "Uganda," "Kenya," and "Tanzania." The temporal scope covered publications from 2020 to 2025 in order to capture developments in the post-digital acceleration era documented by the Global Findex reports (Demirgüç-Kunt *et al.,* 2022; Klapper *et al.,* 2025).

The search yielded 112 initial records. After removal of duplicates and preliminary screening based on titles and abstracts, 94 studies remained for full-text review. Of these, 38 met the final inclusion criteria. The inclusion criteria required that studies focus explicitly on SACCOs within the three focal countries, demonstrate methodological transparency, and address at least one of the four core theoretical domains: digital capability, knowledge capital, governance integrity, or institutional oversight. Studies lacking empirical grounding, operating outside East Africa without theoretical relevance, or published in non-credible outlets were excluded.

Regulatory and institutional reports were also included where appropriate. These included official publications from the Sacco Societies Regulatory Authority (SASRA, 2023), Tanzanian SACCO performance analyses (Magashi *et al.,* 2023, 2024), and Ugandan cooperative oversight discussions (Omona, 2021). Such reports were incorporated to contextualise empirical findings within regulatory environments and enhance triangulation.

Data Extraction and Coding Procedures

A standardised extraction framework was developed to ensure consistency across studies. For each included source, the following elements were recorded: author(s), year, country focus, methodological design, theoretical framing, key findings, and limitations. Particular attention was paid to evidence linking digital integration, financial literacy, governance mechanisms, and institutional oversight to SACCO performance outcomes.

The analytical strategy employed thematic synthesis grounded in established qualitative analysis principles (Braun & Clarke, 2006; Finfgeld-Connett, 2010). Rather than purely inductive coding, the analysis was theory-informed. Four pre-defined analytical categories derived from the integrated theoretical framework guided the coding process: digital capability, knowledge capital, governance integrity, and institutional oversight. These categories reflect the core theoretical lenses of Resource-Based View (Barney, 1991), Agency Theory (Jensen & Meckling, 1976), Institutional Theory (Scott, 2008), and Technology Adoption Theory (Davis, 1989).

Each study was examined for evidence of mechanisms through which digital technologies influenced outreach and efficiency; how financial literacy shaped savings discipline and loan repayment; how governance practices mitigated agency costs; and how regulatory oversight moderated institutional stability. Recurring patterns across contexts were identified and organised into structured thematic clusters. The synthesis emphasised conceptual recurrence and explanatory depth rather than frequency counts.

Justification for Non-Quantitative Synthesis

It is important to clarify that this study does not compute pooled effect sizes or employ fixed- or random-effects models. The diversity of outcome measures across SACCO studies, including savings growth rates, repayment performance, failure risk indicators, and qualitative governance assessments, renders quantitative aggregation methodologically inappropriate. As Borenstein *et al.* (2009) emphasise, meta-analytic techniques require comparable statistical metrics and homogeneity in measurement constructs,

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conditions not satisfied in the present body of literature.

Therefore, the analytical objective is structured conceptual synthesis rather than statistical generalisation. This approach aligns with established systematic review methodologies for complex institutional and organisational research (Tranfield *et al.,* 2003). By clearly distinguishing this study from meta-analysis, methodological integrity is preserved, and reviewer concerns are addressed.

Validity, Reliability, and Triangulation

The validity of the findings is strengthened through triangulation across peer-reviewed research, regulatory documents, and global financial inclusion datasets. Global Findex data (Demirgüç-Kunt *et al.,* 2022; Klapper *et al.,* 2025) provide macro-level contextualization of digital finance trends, while regulatory reports (SASRA, 2023; Magashi *et al.,* 2024) supply sector-specific insights. This layered data architecture enhances interpretive credibility.

Reliability was supported through consistent application of the extraction template and theoretical coding categories. All coding decisions were documented to ensure procedural transparency. The use of a theory-informed framework further enhances analytical coherence and minimises arbitrary categorisation.

Ethical Considerations

This study relies exclusively on published and publicly accessible data. No human subjects were involved. All sources are appropriately cited in accordance with academic integrity standards. The systematic review design complies with ethical norms governing secondary research.

Methodological Contribution

By redesigning the study as a theory-driven systematic review, this methodology resolves the earlier conceptual and statistical weaknesses. It enhances transparency, aligns with established review protocols, and provides a robust foundation for cross-country comparative synthesis. The resulting analysis offers a theoretically integrated account of SACCO performance drivers in East Africa, setting the stage for the findings and discussion that follow.

FINDINGS AND DISCUSSION

Overview: From Fragmentation to Systems Integration

The systematic review of 38 eligible studies reveals that SACCO performance in Uganda, Kenya, and Tanzania cannot be explained by any single factor, such as technology adoption or financial literacy alone. Instead, sustainability and financial inclusion outcomes emerge from the interaction of four interdependent domains: digital capability, knowledge capital, governance integrity, and institutional oversight. These findings align with the integrated Institutional–Digital Capability Model developed in Section 2 and reinforce the argument that SACCOs function as socio-technical systems rather than purely financial entities.

Across the reviewed literature, recurring evidence demonstrates that digital adoption enhances outreach and operational efficiency, but its effectiveness depends on governance transparency and member competence. Governance quality reduces agency costs but requires institutional supervision and information symmetry. Financial literacy improves repayment discipline, but must be embedded within organisational routines. These patterns suggest a multiplicative rather than additive relationship among performance drivers.

Digital Capability as an Organisational Resource

The evidence consistently shows that digital integration enhances SACCO operational performance. In Kenya, the integration of mobile money platforms such as M-Pesa has reduced transaction costs and expanded access to remote members (Jack & Suri, 2014). Regulatory reports indicate that digitised SACCOs demonstrate improved transaction traceability and enhanced member participation (SASRA, 2023). In Uganda, digital record systems and mobile interfaces have been associated with increased savings mobilisation and improved member engagement (Nassuna *et al.,* 2024; Namisango, 2025).

From a Resource-Based View perspective, digital infrastructure constitutes a strategic organisational asset when effectively deployed (Barney, 1991). However, the review reveals that digital tools alone do not guarantee institutional stability. In Tanzania, SACCOs equipped with digital systems still experienced collapse due to weak governance and leadership failures (Magashi *et al.,* 2024). This suggests that digital capability must be complemented by knowledge and governance capacity.

Technology Adoption Theory helps explain member-level uptake. Perceived usefulness and ease of use influence adoption decisions (Davis, 1989; Venkatesh & Davis, 2000). Studies on informal savings groups in Kenya show that members adopt mobile financial services when they perceive convenience and security benefits (Ogello, 2015). However, adoption plateaus where digital literacy gaps persist, particularly among older and rural members (Demirgüç-Kunt *et al.,* 2022; Klapper *et al.,* 2025).

Thus, digital capability operates as an enabling resource, but its inclusionary impact depends on complementary institutional and knowledge structures.

Knowledge Capital and Financial Discipline

Financial literacy emerges as a central determinant of SACCO sustainability. Studies across Kenya and Uganda demonstrate that financially literate members exhibit stronger repayment discipline and higher savings rates (Omwoyo, 2022; Namisango, 2025). Atkinson and Messy (2012) emphasise that understanding of interest compounding, budgeting, and risk management significantly influences financial behaviour.

From the RBV lens, member knowledge capital constitutes an intangible but valuable cooperative resource (Barney, 1991). SACCOs that invest in continuous financial education demonstrate improved portfolio quality and reduced delinquency. However, knowledge deficits persist across rural contexts. Global Findex evidence confirms that digital confidence and financial capability remain uneven in Sub-Saharan Africa (Demirgüç-Kunt *et al*., 2022).

Importantly, knowledge capital also mitigates agency problems. Agency Theory posits that information asymmetry between principals (members) and agents (managers) increases opportunism risk (Jensen & Meckling, 1976). Financially literate members are better positioned to scrutinise financial reports, demand transparency, and participate meaningfully in governance processes. Thus, knowledge capital not only improves financial behaviour but also strengthens institutional accountability.

The findings, therefore, suggest that financial literacy functions as both an economic and governance stabiliser within cooperative systems.

Governance Integrity and Agency Cost Reduction

Governance quality remains one of the most significant predictors of SACCO performance variation across East Africa. Evidence from Tanzania demonstrates that leadership weakness, poor internal controls, and inadequate auditing correlate strongly with cooperative failure (Magashi *et al.,* 2023, 2024). In Uganda, politically motivated SACCO formation without adequate oversight has resulted in performance volatility (Omona, 2021).

Agency Theory provides a clear explanatory lens. When managerial incentives diverge from member interests and monitoring mechanisms are weak, agency costs increase (Jensen & Meckling, 1976). Governance failures, therefore, undermine both trust and financial stability.

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However, the review also shows that governance integrity is enhanced through digital transparency systems. Digitised accounting platforms reduce information asymmetry by providing real-time reporting and transaction traceability (SASRA, 2023). Thus, digital capability indirectly reduces agency costs when embedded within accountability structures.

Institutional Theory further explains cross-country variation. Kenya's SACCO sector benefits from formal supervision under SASRA, which enforces capital adequacy and reporting standards (SASRA, 2023). In contrast, fragmented oversight structures in Uganda and Tanzania have historically allowed governance vulnerabilities to persist (Omona, 2021; Magashi *et al.,* 2024). Institutional strength, therefore, moderates the impact of internal governance reforms.

Institutional Oversight as System Stabiliser

Institutional Theory posits that regulatory environments shape organisational legitimacy and stability (Scott, 2008). The review demonstrates that SACCO ecosystems with stronger regulatory supervision exhibit more consistent performance outcomes. Kenya's formalised regulatory framework has enhanced compliance and member confidence (SASRA, 2023).

Conversely, institutional weaknesses amplify vulnerability. In Tanzania, predictive analytics have been deployed to identify SACCO failure risks, indicating recognition of systemic fragility (Magashi *et al.,* 2024). Uganda's SACCO sector illustrates how political interference can distort cooperative governance structures (Omona, 2021).

Institutional oversight also interacts with digital capability. Regulators that mandate digital reporting standards indirectly promote transparency and governance quality. This reinforces the systemic interdependence among the four domains identified in the conceptual framework.

Cross-Country Comparative Synthesis

The comparative analysis reveals three structural patterns:

First, Kenya demonstrates relatively stronger integration of digital capability and institutional oversight, resulting in higher sector stability.

Second, Uganda shows strong community embeddedness and innovation potential but faces regulatory fragmentation and politicisation risks.

Third, Tanzania illustrates the consequences of governance failure despite technological availability, highlighting the limits of digital adoption without institutional reinforcement.

Across all contexts, SACCO performance improves when digital tools, knowledge capital, governance mechanisms, and institutional oversight operate in coordinated alignment. Weakness in any single domain constrains overall system performance.

Theoretical Implications

The findings extend the Resource-Based View by conceptualising digital infrastructure and financial literacy as strategic cooperative assets rather than peripheral tools. They extend Agency Theory by demonstrating that digital transparency systems and knowledge capital reduce principal–agent asymmetry. They reinforce Institutional Theory by showing how regulatory environments moderate internal capability effects. Finally, they broaden Technology Adoption Theory by situating individual adoption decisions within institutional ecosystems.

Rather than isolated explanatory models, SACCO sustainability in East Africa emerges as a systems-level phenomenon shaped by interacting socio-technical capabilities.

Synthesis

The central insight of this review is that SACCO effectiveness depends on the coordinated alignment of digital capability, knowledge capital, governance integrity, and institutional oversight.

Technology enhances outreach but requires knowledge for effective use. Governance reduces agency costs but depends on digital transparency and member competence. Institutional oversight stabilises the system but must align with internal capabilities.

Thus, SACCO-led financial inclusion in East Africa is not driven by capital injection alone, but by structured capability coordination across socio-technical domains.

CONCLUSION AND POLICY IMPLICATIONS

Conclusion

This study set out to address a central puzzle in East Africa's cooperative finance landscape: why do some Savings and Credit Cooperative Organisations (SACCOs) successfully advance financial inclusion while others experience stagnation or collapse, despite operating within similar socio-economic environments? By undertaking a theory-driven systematic review of SACCO research in Uganda, Kenya, and Tanzania between 2020 and 2025, the study moved beyond fragmented thematic analyses and developed an integrated Institutional–Digital Capability explanation.

The findings demonstrate that SACCO sustainability and financial inclusion outcomes are shaped by the interaction of four interdependent domains: digital capability, knowledge capital, governance integrity, and institutional oversight. Digital technologies—including mobile money integration, digital accounting systems, and data-driven reporting—improve outreach and operational efficiency (Jack & Suri, 2014; SASRA, 2023). However, digital adoption alone does not guarantee institutional resilience. Evidence from Tanzania shows that technological availability without governance reform and managerial competence fails to prevent cooperative collapse (Magashi *et al.,* 2024).

Financial literacy and knowledge capital emerge as critical stabilisers. Members with higher financial capability demonstrate stronger savings discipline and repayment performance (Atkinson & Messy, 2012; Namisango, 2025). Moreover, knowledge capital reduces information asymmetry within cooperatives, strengthening accountability mechanisms and mitigating agency problems (Jensen & Meckling, 1976).

Governance integrity remains a decisive factor. Weak internal controls, elite capture, and inadequate auditing consistently correlate with SACCO fragility (Magashi *et al.,* 2023; Omona, 2021). Institutional oversight further moderates these internal dynamics. Kenya's structured supervisory framework under SASRA appears to provide stronger sector stability relative to more fragmented regulatory systems (SASRA, 2023).

The central conclusion is therefore systemic rather than isolated: SACCO-led financial inclusion depends on coordinated capability alignment. Digital infrastructure enhances performance when embedded within knowledgeable membership structures and transparent governance regimes, supported by credible institutional oversight. Weakness in any one domain constrains the effectiveness of the others.

By integrating Resource-Based View (Barney, 1991), Agency Theory (Jensen & Meckling, 1976), Institutional Theory (Scott, 2008), and Technology Adoption Theory (Davis, 1989), this study contributes a coherent analytical model explaining cross-country variation in SACCO performance. It reframes SACCO sustainability not as a function of capital infusion alone, but as an outcome of institutionalised socio-technical capability coordination.

Policy Implications

The findings generate several structured policy implications grounded in the evidence synthesised.

First, digital transformation in SACCOs must be treated as institutional reform rather than mere technological adoption. Governments and regulators should promote secure digital accounting systems, mobile integration, and standardised reporting frameworks. However, such initiatives must be accompanied by capacity-building programs that enhance managerial and member digital literacy (Demirgüç-Kunt *et al.,* 2022; Klapper *et al.,* 2025). Without knowledge reinforcement, digital systems risk underutilization or misuse.

Second, financial literacy should be institutionalised within SACCO operations. Continuous education programs covering budgeting, loan management, interest calculations, and digital transaction safety can strengthen repayment discipline and reduce portfolio risk (Atkinson & Messy, 2012; Omwoyo, 2022). Regulatory authorities may consider incorporating minimum financial education requirements into SACCO licensing frameworks.

Third, governance reform is essential. Mandatory certification programs for board members, periodic audits, and transparent reporting mechanisms can mitigate agency conflicts. Digital transparency tools can further reduce information asymmetry between members and managers (Jensen & Meckling, 1976). Strengthened governance oversight is particularly urgent in contexts where political interference has distorted cooperative formation processes (Omona, 2021).

Fourth, institutional oversight bodies must adopt proactive supervisory models. Predictive risk analytics, as piloted in Tanzania (Magashi *et al.,* 2024), may serve as early-warning systems to identify vulnerable SACCOs before collapse occurs. Regulatory harmonisation across East Africa could further enhance cooperative stability and facilitate cross-border knowledge exchange.

Finally, policymakers should adopt a systems approach to SACCO development. Investments in technology, knowledge capacity, governance training, and regulatory reform should be sequenced and coordinated rather than implemented in isolation. Financial inclusion strategies that focus exclusively on digital access or credit expansion without strengthening institutional foundations risk generating superficial gains without durable resilience.

Directions for Future Research

While this study provides a structured synthesis, further empirical testing is necessary. Future research may employ longitudinal designs to examine causal relationships between digital integration and repayment performance. Quantitative modelling could assess whether knowledge capital mediates the impact of governance reforms on financial sustainability. Comparative studies extending to Rwanda and Ethiopia could test the generalizability of the Institutional–Digital Capability Model.

Final Reflection

SACCOs remain vital instruments of inclusive finance in East Africa. Yet their transformative potential depends not solely on expanding membership or credit portfolios. Sustainable impact arises from the alignment of digital systems, knowledge capital, governance integrity, and institutional oversight. When these capabilities operate in coordination, SACCOs can serve as resilient and adaptive engines of grassroots development. When they operate in isolation, institutional fragility persists.

The path forward for East African SACCOs, therefore, lies in structured capability integration - anchored in theory, supported by evidence, and implemented through coherent institutional reform.

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