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# FORMALISATION OF INFORMAL DIGITAL SAVINGS AND LENDING ASSOCIATIONS: A PATHWAY TO DIGITALLY LED CO-OPERATIVE FINANCIAL INSTITUTIONS IN TANZANIA

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**ABSTRACT:** Social media-based digitally informal savings and lending associations (DISLAs) are growing rapidly, indicating a shift in collective financial behaviour. The sustainability and operational concerns arise from this increase. Hence, there was urgent need for the empirical study to examine DISLAs' socioeconomic dynamics and the feasibility of formalising them as Co-operative Financial Institutions (CFIs) to improve their efficiency. Data were collected from 147 WhatsApp subscribers who use M-KOBA, a mobile finance application that interfaces with Vodacom Tanzania's M-Pesa, using cross-sectional design. Data was collected using online surveys and semi-structured interviews. Qualitative data were thematically examined, whereas quantitative data were analysed descriptively. The study findings revealed that majority (92.5%) of respondents use WhatsApp for M-KOBA DISLA mobilisation. It was also found that DISLAs' operating approaches were aligned with ideal co-operative values implying its feasibility of being formalised to CFIs. Moreover, it was revealed that, majority (91.8%) of the respondents willing to formalise their DISLAs into CFIs. However, despite the formalization feasibility and willingness, legal and regulatory issues, limited co-operative education, capital constraints, and leadership gaps need to be addressed for effective transformation. The study concludes that, DISLAs formalization marks the opportunity to increase youth engagement in financial co-operatives. The study recommends for streamlined legal procedures, co-operative education programs, digital incubation hubs, and targeted funding. Also, it recommends further research in examining digital CFI scaling up models.

**Keywords:** Digital informal Savings and Lending Associations (DSLAs), M-KOBA, Social media Platforms, Co-operative Financial Institutions, Formalisation.

## INTRODUCTION

The proliferation of digital technology has fundamentally altered the global financial environment, causing significant changes in the structure, distribution, and accessibility of financial services. As part of the Fourth Industrial Revolution (4IR), digitalisation and digitization drive business model innovation, shifting value chains, and redefining channels for delivering financial products and services (Mavlutova et al., 2020). Global technological transformation not only improve efficiency but also act as a solution for the unbanked communities, promoting financial inclusion by closing financial access gaps for underserved populations (Adelaja et al., 2024; Agwu, 2021). The most significant transformational

impacts have been indicated by digitalised trends in the traditional financial services business, as well as changes, consequences, and implications for traditional banking (Gerlach, 2020). Notably, the digital transformation of social media platforms has extended beyond their typical communication roles, with them now used as tools for mobilizing communal financial practices, entrepreneurship, and informal economic coordination (Feitosa et al., 2022; Nambisan et al., 2019). These emerging evidences indicate that digitalisation is encouraging the convergence of technology and grassroots financial systems, particularly among youth, who are disproportionately excluded from conventional banking systems while they are the major users of the social medias. There has been evidence of the establishment and growth of youth-led digital associations in Africa, which are self-organised financial groups founded and operated through digital platforms (Winstead et al., 2022). These associations have grown as a result of increased financial demand and financial literacy among youth-led small and medium-sized businesses, indicating a significant shift in collective financial behaviour through the use of mobile applications and social media platforms to mobilise resources, extend credit, and foster financial solidarity among members (Nyeko et al., 2024). In Tanzania, for example, the contribution of mobile money through various mobile platforms such as the mobile-based MKOBA platform integrated with M-pesa mobile money services has enabled people to engage in collective saving, peer-to-peer lending, and mutual aid with remarkable flexibility and convenience (Vodacom, 2024; Mganyizi, 2023). This phenomenon is important in reducing youth unemployment and improving livelihoods, particularly in Tanzania, where youth unemployment remains persistently high (Ngene et al., 2021; Metu et al., 2020). Vodacom Tanzania (2024) indicate a sustained increase in the use of its group savings product, M-KOBA, demonstrating a strategic commitment to increasing financial inclusion through digitally facilitated informal savings model. M-KOBA, which is widely used across the country, particularly among women, has grown significantly, with female users initiating over 60% of transaction value and the platform processing more than 100% of total value. This trend highlights the platform's success in promoting financial inclusion and economic empowerment. Furthermore, the growing participation of both formal and informal groups which accounts for more than 60% of the total one trillion shillings transacted through M-KOBA demonstrates its role in facilitating community-based financial coordination, as well as its relevance to the changing landscape of digitally informal financial associations. While M-KOBA demonstrates the potential of digital platforms to promote financial inclusion and community-based economic empowerment, particularly among informal and loosely regulated user groups such as family networks and peer-based associations, it also raises critical concerns about operational inefficiencies, a lack of consumer protection, limited accountability, and overall financial fragility. These associations frequently function informally and without legal registration, exposing members to a variety of legal and financial risks. Because they lack formal governance mechanisms, they are vulnerable to issues such as fund mismanagement, erosion of trust, legal difficulties, and a lack of institutional safeguards. Given these concerns, this study recognised a pressing need to evaluate the possibility of formalising DISLAs into structured institutions such as CFIs. Formalisation was seen as a strategy to reduce operational risks, improve regulatory control, and open up chances for institutional support and long-term financial growth.

**Objectives of the Study:** The main objective of this study was to analyze the nature of DISLAs and the potential of transforming them into a formal CFI. While the specific objectives are to: examine DISLA's operational and socioeconomic practices; assess the

alignment of DISLA's operational and socio-economic practices with co-operative principles; examine the willingness of DISLA members to transition into formal CFIs; identify key barriers and enabling factors for DISLAs transition to formal CFIs.

#### Research Questions

- i. What are the operational and socio-economic practices of DISLAs?
- ii. To what extent do DISLAs operational and socio-economic practices align with co-operative principles?
- iii. To what extent DISLAs members are willing to transition into formal CFIs?
- iv. What are the barriers and enablers for DISLAs transition to formal CFIs?

**Significance of the Study:** The study findings are significant in several aspects including its contribution to academic knowledge by bridging gaps between studies on digital financial inclusion (DFI) and CFI development. Additionally, the study findings contribute to policy transformation by outlining concrete approaches for incorporating DISLAs into formal financial ecosystems. Furthermore, the study findings offer practical understanding for co-operative development practitioners, DISLAs leaders and members as well as the development partners striving to promote sustainable, inclusive economic growth. Moreover, the study findings contribute to Tanzania's overarching aims of financial inclusion, youth empowerment, and harnessing the 4IRs for social and economic advancement.

## LITERATURE REVIEW

### Theoretical Framework

**Social Capital Theory:** Pinter (1993) proposed Social Capital Theory (SCT), which holds that networks of trust, reciprocity, shared norms, and civic involvement improve collective behaviour and institutional performance. In the context of DISLAs, social capital is represented by trust-based connections among members, mutual financial support, and informal rules governing savings and lending behaviour. These associations use bonded social capital, which is defined by intimate links and common identities, to expedite financial transactions, enforce accountability, and limit risk. The SCT helped to explain how DISLAs adolescents can self-organize around informal financial practices despite their limited access to formal institutions. It also demonstrates how social capital acts as a basis for group unity, decision-making, and resilience in times of crisis. Prior research (Yuen & Tang, 2023; Saz-Gil et al., 2021; Valentinov & Iliopoulos, 2021) confirms that informal self-help associations can function well under latent co-operative norms, driven primarily by social relationships rather than formal governance structures.

**Digital Financial Inclusion Framework and its Significance:** The DFI Framework focusses on using digital technologies, including mobile money, digital wallets, and fintech platforms, to increase access to inexpensive, convenient, and secure financial services for underprivileged groups. According to Rachmad (2025), digital financial inclusion lowers transaction costs, increases transparency, and promotes financial discipline, particularly among young people and informal groups. In this study, DFI illustrates how DISLA members communicate using digital technologies like WhatsApp and MKOBA for savings, lending, and record-keeping. These platforms not only improve operational efficiency, but they also mimic essential characteristics of formal financial institutions like interest accrual, financial tracking, and peer supervision. As such, DFI contributes to understanding how technology

mediates informal financial practices and can serve as a driver for formalisation. According to Aziz & Naima (2021) there is a growing body of literature furthering the influence of DFI on marginalised people. However, mainstream scholars have not concentrated on identifying the possible drivers and constraints of digital approaches to financial inclusion. Abdul et al. (2024) noted that the social dynamics of financial involvement with new technologies necessitate a shift away from a simple individualistic adopter/non-adopter binary paradigm and supply-oriented financial infrastructure. They concluded that, while digital services have reduced and filled the gap in physical access to financial services, they have not been used due to a lack of fundamental connectivity, financial knowledge, and social awareness. On the other hand, Liu et al. (2021), noted that, the rise of DFI has had a major Internet threshold effect on economic growth, encouraging small and medium-sized firm entrepreneurship.

**Logic behind using the two theories:** The combination of these two theoretical frameworks provides a thorough framework for understanding DISLAs. The SCT explains the social cohesion and trust that support informal group behaviour, whereas the DFI framework shows how digital platforms broaden the scope and functioning of these associations. The convergence of SCT and DFI results in a one-of-a-kind hybrid model of technologically enabled informal co-operativism that prepares youth-led organisations to move into formal CFIs. Thus, this integration is critical for developing inclusive financial policies and interventions that reflect Tanzanian youth's social realities as well as their technology preferences.

### **Empirical Review**

The Fourth Industrial Revolution (4IR) has transformed organisational business paradigms by integrating physical, digital, and biological systems. According to Ngowi (2022), 4IR creates new potential for co-operative development by improving members' livelihoods, increasing income, improving governance (participation in decision-making), expanding access to services, and strengthening agricultural value chains. However, these opportunities are mitigated by obstacles like as digital literacy gaps, unequal access to technology, and regulatory regimes that fall behind innovation (Mramba & Msuya, 2024). To fully exploit 4IR for co-operative development, inclusive digital capacity-building, adaptive policies, and formal acknowledgement of developing digital co-operative models are required (Ngowi, 2022). Digitally financial informal associations are a modern adaptation of traditional informal financial systems such as Rotating Savings and Credit Associations (ROSCAs) and Accumulating Savings and Credit Associations (ASCAs), enhanced with digital tools such as social media and mobile money platforms (Wang et al., 2024; Sadiku et al., 2022; Mavlutova et al., 2020). In Sub-Saharan Africa, these associations, primarily created by youth, give alternative access to savings and credit, particularly for individuals excluded from traditional banking systems due to a lack of collateral and financial history (Zambrano et al., 2023). Members of these associations are frequently motivated by necessity and peer networks, and they operate using flexible, peer-accountable models (Winstead & Wells, 2022). While the rise of digitally mutual led firms in Africa reflects key co-operative characteristics such as mutual help and democratic involvement, they are still informal and lack institutional aspects such as legal registration and financial audits (Winstead & Wells, 2022). This limits their alignment with the formal co-operative principles outlined by the International Cooperative Alliance (ICA). Empirical evidence (Turkson, 2022) indicates that, despite the important functions that informal financial associations play, their formalisation faces numerous challenges, including inadequate financial literacy, legal complexity, and insufficient

institutional support. However, Kiaga & Leung (2020) argue that formalising informal institutions, such as those found in the informal digital sector, necessitates enabling factors such as ubiquitous mobile technology use, young digital engagement, and inclusive national policies that provide viable entry points for transformation. Furthermore, Jacolin et al., (2021) argue that financial innovation is important for the effective formalisation of informal financial services in emerging and developing countries, as well as policy and programmatic interventions such as legal recognition, targeted capacity-building, and the development of intermediary support structures.

### **Literature Gap**

While the literature emphasises DISLAs' growing importance in fostering financial inclusion among youth, there is a lack of empirical research that comprehensively investigates their operational models, alignment with co-operative principles, and pathways to formalisation. Most existing research focusses on digital financial services or informal savings organisations, but rarely on the intersection of the two, especially in youth-led environments. This study aimed to fill a major vacuum by producing contextualised knowledge that may improve both policy and practice in youth-focused cooperative development in the digital age.

### **METHODOLOGY**

This study used a cross-sectional research design to examine the operational characteristics, socioeconomic dynamics, and formalisation prospects of DISLAs in Tanzania. The design was chosen for its ability to capture a snapshot of existing practices and perceptions among several DISLAs. A purposive sampling was employed to identify 147 DISLA members, with WhatsApp serving as the shared subscribing platform. Primary data was collected using standardised online questionnaire distributed to members and semi-structured interviews with DISLA leaders. The survey instrument was created to gather quantitative information on socio-demographics, savings habits, lending practices, and adherence to co-operative values. The interviews yielded more qualitative perspectives into leadership dynamics, group governance, digital participation, and perceived challenges and enablers for formalisation. Secondary sources, such as reports from Tanzania's Co-operative Regulatory Authority, policy documents, and peer-reviewed literature, were analysed to provide a fuller contextual knowledge and facilitate data triangulation. Quantitative data were analysed using descriptive statistics (frequency and percentages) in SPSS Version 26, while qualitative responses were thematically analysed using a coding system that reflected major parts of the study objectives and theoretical conceptions. Ethical integrity was strictly maintained throughout the research process. All participants gave informed consent, and participation was entirely voluntary. Respondent anonymity and confidentiality were protected. Despite constraints such as self-reporting bias and the lack of longitudinal tracking to examine behavioural changes over time, the methodology used provided a robust and diversified picture of DISLAs operations. It also provides a solid platform for understanding how these informal digitally associations which many of them are owned and operated by youth can transition into formal CFIs in Tanzania's changing financial landscape.

### **FINDINGS AND DISCUSSIONS**

**Chapter Overview:** This chapter covers the study findings and a full overview of DISLAs in Tanzania. The discussion is organised around the study's four objectives: (i) analysing DISLAs' socioeconomic practices; (ii) assessing the extent to which DISLAs aligns with co-operative principles; (iii) investigating DISLAs' willingness and motivations to transition into formal CFIs; and (iv) identifying the barriers and enablers for the DISLAs formalisation. The

study findings are contextualised within the theoretical frameworks of Social Capital Theory and Digital Financial Inclusion.

**Socio-Demographic Characteristics of Respondents:** The study findings (Table 1) show that among the 147 respondents, their demographic profile was as follows: more than half (54%) of the respondents were females and 46% males, with 67% aged 25-30, 24% aged 18-24, and 9% aged above 30 years. In terms of education, more than three quarter (76%) had completed secondary or higher education, while 24% had completed primary school. The employment status varied, with 41% self-employed, 28% formally employed, 23% students, and 8% jobless. These statistics demonstrate that DISLAs primarily attracts digitally, economically active youth from a variety of educational and occupational backgrounds. The findings on gender indicates females are the main members of DISLAs. Generally, the demographic profile particularly age lends support to the ideal that digitally enabled financial institutions can serve as accessible channels for youths’ financial empowerment.

**Table 1: Socio-Demographic Characteristics of Respondents (n = 147)**

Characteristic	Frequency (n=147)	Percentage (%)
Sex: Female	79	54
Male	68	46
Age: 18–24	35	24
25–30	99	67
Above 30	13	9
Primary Education	35	24
Secondary or Higher Education	112	76
Self-employed	60	41
Formally employed	41	28
Students	34	23
Unemployed	12	8

Source: Field Data

**Socio-Economic Practices and Digital Platforms Used by DIYSLAs:** Study findings (Table 2) indicate respondents use digital technology to mobilise and operate DISLAs to mobilise and channel financial resource to their respective members. WhatsApp was the most popular (92.5%) social media channel for DISLA’s communication and coordination. Telegram (18%) and Facebook Groups (10%) were least mentioned as adopted social media platforms. It was revealed that, WhatsApp’s accessibility, smartphone ubiquity, and affordability appealed to youth digital habits. Jacolin et al. (2021) emphasize the importance of financial innovations due to mobile banking and social media platforms revolutions. It was revealed that, more than three quoter (82.3%) of DISLAs used the MKOBA digital app, which is integrated with Vodacom M-Pesa, to manage their group funds (Table 2). MKOBA allows savings contributions, peer-to-peer lending, real-time record-keeping, balance checks, and emergency support. All DISLAs reported biweekly or monthly savings cycles with TZS 5,000–50,000 contributions. Like ROSCAs, VICOBA, and VSLAs, 87% of DISLAs used informal intra-group loans at interest rates from 5% to 10% per lending cycle. In addition, 69% of DISLA members helped each other during health, funeral, and educational emergencies, and 82% used M-KOBA digital tools for transparent and accurate financial record-keeping. The hybrid model blends the trust-based mechanisms of conventional self-help groups with the operational efficiency of digital financial technology, according to the study. The study supports Block’s (2022) claim that mobile money systems boost unbanked

people’s financial resilience and inclusion. Tafotie (2020) indicate that developing and investing in digital financial services could be successful since they reduce transactional friction, establish financial discipline, and foster youth accountability. The study findings imply that introducing informal M-KOBA financial groups into formal financial ecosystems could increase formal youth access to finance and lessen informal association risks and problems. The study also suggests that DISLAs’ hybrid digital-informal paradigm fosters co-operative finance innovation by duplicating social capital through digital trust mechanisms and peer monitoring. These digitally enhanced processes can boost financial efficiency and prepare youth-led co-operative organisations for formalisation because digital record-keeping and transparency practices match formal financial institution regulations.

**Table 2: Digital Platforms Used by DIYSLA Members (n = 147)**

Platform	Frequency	Percentage (%)
WhatsApp	136	92.5
Telegram	27	18
Facebook Groups	15	10
MKOBA	121	82.3%

Source: Field data

**Alignment of DISLAs with Co-operative Principles:** Study findings (Table 3) revealed a significant alignment between the operational practices of DISLAs and ideal co-operative principles and practices. Strong alignment was observed for voluntary and open membership (95%), member economic participation (100%), autonomy and independence (91%), and democratic member control (88%). The study findings highlight the inherent self-organised and participatory features of DISLAs, where youth independently establish and manage organisations, contribute financially, engage in collective decision-making, and uphold operational independence. In the context of aligning DISLAs practices with co-operative practices, significant inconsistencies were identified, particularly in the areas of education, training, and information, which accounted for 34%, together with co-operation among co-operatives at 12%. Subsequently, a limited proportion of respondents indicated that they had received formal training, education, or information in areas such as co-operative governance, legal compliance, or financial literacy, highlighting a deficiency in institutional support for the improvement of knowledge. In a similar vein, the ineffective collaboration among DISLAs groups indicates a deficiency in horizontal networking structures, which are crucial for fostering solidarity, achieving economies of scale, and facilitating sectoral learning. The constraints identified align with the findings of Slade et al., (2020), who indicate that informal groups often embody co-operative norms, yet they rarely institutionalise these practices because of gaps in co-operative knowledge and structural isolation. The study findings signify that DISLAs hold essential capacities and values similar to those of formal co-operatives, thereby positioning them suitable for structured formalisation into digital co-operative societies. Nevertheless, in the absence of consistent efforts to facilitate co-operative education and promote inter-group learning, their growth and adaptability could be constrained. Secondly, the study findings show that the absence of co-operation among DISLAs hinders the formation of digital secondary co-operative structures such as

federations or unions, which are essential for effective lobbying, capacity building, and resource pooling.

**Table 3: Alignment with Co-operative Principles (n = 147)**

Co-operative Principle	Frequency	Alignment (%)
Voluntary and open membership	140	95
Democratic member control	129	88
Member economic participation	147	100
Autonomy and independence	134	91
Education, training, and information	50	34
Co-operation among co-operatives	18	12
Concern for community	91	62

Source: Field data

**Willingness and Motivations to Formalize the DISLAs:** The study findings (Table 4) revealed a significant inclination among DISLAs to transition from informal association to more structured CFIs. A notable (91.8%) of the study respondents indicated their willingness and readiness to formalise their DISLAs, contingent upon the availability of enabling support mechanisms. The readiness is derived from several factors including, access to formal financial services and credit facilities (83%), legal recognition and protection (77%), opportunities for scalability and structured growth (62%), and networking with other DISLAs (44%). The study findings corroborate Winstead (2022); Kiaga & Leung (2020), suggesting that youth-led informal enterprises are pursuing legal status to enhance access to finance, increase resilience, and expand their socioeconomic impact. The articulated prerequisite for legal acknowledgement proposes a dual purpose: it reflects a pursuit of legitimacy while also addressing the need for conflict resolution and fostering enhanced trust in engagements with external stakeholders, including financial institutions, local governments, and development partners. The study findings advocate that the digital environment in which DISLAs function significantly influences their readiness. Digital interactions, such as managing group savings on platforms like M-KOBA, coordinating through WhatsApp, and maintaining digital records, equip youth with essential skills in organisation, leadership, and financial literacy. This informal digital learning environment equips individuals to meet the operational requirements of structured co-operative groups. The study findings specify that the significant motivation for formalisation represents an untapped opportunity for co-operative development organisations and policymakers to cultivate a new generation of youth-led CFIs. Moreover, the digital skills and organisational capabilities demonstrated by DISLAs members suggest that transforming these organisations into formal CFIs will require minimal foundational training, especially if initiatives influence their current practices. Moreover, the study findings imply that aligning formalisation paths with the aspirations of youth, especially regarding credit access, legal identification, and network development, has the potential to enhance financial inclusion and promote economic empowerment among young people in Tanzania.

**Table 4: Willingness and Motivation for Formalization (n = 147)**

Willingness/ Motivation for Formalization	Frequency	Percentage (%)
Willing to Formalize	135	91.8
<b>Motivation for Formalization</b>		
Access to formal financial services	122	83
Legal recognition and protection	113	77

Opportunities for growth and scalability	91	62
Networking with other youth co-operatives	65	44

Source: Field Data

**Barriers and enabling factors to DISLAs Formalization:** The study findings (Table 5) revealed numerous structural and bureaucratic barriers and enablers need to be addressed for effective formalisation of DISLAs into formal CFIs. Seventy-two percent (72%) of the study respondents identified legal and bureaucratic complexity as the primary barrier need to be refined. The existing legislative constraints encompass protracted registration processes, considerable compliance costs, and ambiguity surrounding legal obligations. The study findings revealed limited co-operative education to be identified as the second most (68%) significant barrier need to be addressed for effective transformation. This gap was claimed that it may limit knowledge among youth concerning co-operative models, governance processes, and regulatory obligations. In the course of the interview, a statement was made by one of the group leaders:

*“We understand how to save and lend, but no one has ever taught us what financial co-operatives really are. It’s as if we’re acting blindly in terms of regulations and policies.”*

The above quotation demonstrates that, while youth are actively engage in informal saving and lending through their digital platforms, they lack formal education on the true nature of financial co-operatives, including governance, regulations, and legal procedures. This knowledge gap raises concerns about mismanagement, legal noncompliance, and inadequate organisational frameworks. It may also hinder their ability to properly utilise co-operative models as economic empowerment instruments. The study findings also revealed capital constraints to be worked on as was mentioned by (66%) of the study respondents. It was revealed that, since many youth-led groups lack the initial funds required for registration as CFI (ie the minimum capital requires by Savings and Credit Co-operative Societies (SACCOS) regulation in Tanzania, office setup, or the statutory reserves required by formal co-operative laws. Additionally, weak governance and leadership capacity (59%) creates internal risks, particularly when scaling and managing formalised entities. Furthermore, the study found that, 38% of respondents expressed anxiety of losing the flexibility and informality that make DISLAs appealing. The study respondents were concerned that legal frameworks would impose inflexible reporting systems, bureaucratic demands, or external control mechanisms that could erode the trust-based culture of their informal associations. On the other hand, qualitative evidences from interviews identified a number of enabling characteristics that could help with effective transitions. Most notable was the advent of digital platforms such as M-KOBA and M-Pesa, which streamline financial operations and increase transparency. It was also revealed that trust-based peer networks within DISLAs generate high social capital, a critical asset for long-term co-operative governance, as backed by Saz-Gil (2021) and Valentinov (2021). The study findings also found that access to training opportunities, particularly in leadership and financial literacy, was regarded as crucial. As one key informant mentioned:

*“We already have the discipline to save and handle money. If someone could teach us about financial co-operative models and offer us a startup loan, we could expand more quickly and lawfully.”*

The above quote emphasises that DISLAs have solid foundations such as trust-based networks, digital platforms, and financial discipline that help them transition to formal CFIs. Thus, to develop legally and sustainably, they will require specialised training in financial co-operative principles and financial literacy. The study findings provide an important opportunity for co-operative stakeholders to support youth through digital tools, education, and inclusive policy.

**Table 5: Barriers to Formalization (n = 147)**

<b>Barrier</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Legal and bureaucratic complexities	106	72
Limited co-operative education	100	68
Capital constraints	97	66
Weak leadership and governance	87	59
Fear of losing flexibility and informality	56	38

Source: Field Data

**Theoretical Implication:** The study findings provide strong evidence for the Social Capital Theory, highlighting the critical role of networks, norms, and trust in enabling collective action and the mobilisation of resources. The study findings indicate that DISLAs members exhibited significant mutual trust, peer accountability, and solidarity, which enabled their informal organisations to endure despite insufficient external support. Peer-to-peer lending, mutual assistance, and collective decision-making all exemplify the principles of social capital theory related to bonded social capital. The readiness of DISLA members to consistently contribute to savings and provide emergency aid indicates a strong normative framework grounded in shared values and social cohesion. Moreover, the study findings expand the relevance of SCT within the digital context, revealing a innovative hybrid form of “digital social capital.” WhatsApp and M-KOBA serve dual purposes: they enhance convenience while simultaneously reinforcing relationships, ensuring group accountability, and fostering financial transparency. This illustrates that the creation of digital tools can facilitate and amplify the impacts of social capital within modern financial collectives. The study findings indicate that the Digital Financial Inclusion (DFI) framework illustrates a significant contribution of DISLAs to enhancing financial access for marginalised youth populations. The integration of mobile money applications like M-Pesa and M-KOBA into savings and lending practices signifies a significant transition from traditional informal ROSCAs, VSLAs, and VICOBA to digitally facilitated financial ecosystems. The findings of the study indicate that digital infrastructure has the potential to lower transaction costs, enhance transparency, improve the accuracy of financial record-keeping, and expand financial access, especially when associated with the digital behaviours of youth. Moreover, the DFI framework clarifies the motivations of DISLA members to formalise, as their digital engagement has equipped them with fundamental financial management skills, record-keeping systems, and a sense of collective accountability. These informal experiences serve

as a foundation for the development of formal CFIs, implying that digital technologies not only promote inclusiveness but also prepare users for incorporation into formal financial institutions.

**Policy Implications:** The study findings hold significant implications for policy regarding youth engagement in the financial system and the advancement of co-operatives, particularly within the framework of the emerging Fourth Industrial Revolution. The emergence of DSLAs and their swift expansion offer a unique opportunity for governments, development partners, and regulatory bodies to foster financial innovation and inclusion spearheaded by the youth. The study finding reveals that over 91% of the respondents are inclined to formalise their DSLAs into formal CFIs, highlighting the significant challenges posed by structural and legal constraints. This highlights the necessity of adopting specific policy measures.

## CONCLUSIONS AND RECOMMENDATIONS

**Conclusions:** The study concludes that, DSLAs represent an innovative active approach to promoting youth-centered financial inclusion and entrepreneurship in Tanzania. The study also concludes that by utilising digital platforms such as WhatsApp and mobile money services like MKOBA, these organisations have established accessible, trust-based financial ecosystems that effectively respond to the socioeconomic realities of Tanzanian youth. Additionally, the study indicates that DSLAs exhibit a significant alignment with internationally recognised co-operative principles and values, particularly regarding member engagement, democratic governance, and economic solidarity, thereby positioning them as viable precursors to formal CFIs. Furthermore, the study concludes that the strong willingness of members to formalise their associations, dependent on the presence of supportive institutional and regulatory frameworks, indicates their potential to integrate into formal CFIs.

**Recommendations:** The study recommends that policymakers should develop and execute frameworks that are sensitive to youth needs, facilitating the transition of DSLAs into formal CFI structures. Regulatory bodies ought to incorporate legal provisions for digitally managed CFIs and enhance legal channels by establishing streamlined, digital-first registration processes tailored to the operational characteristics of DSLAs. The study findings also recommend that DSLAs should be established in a sustainable way by implementing targeted capacity-building initiatives. The initiatives encompass co-operative education programs that address essential subjects including co-operative governance, leadership development, financial literacy, and legal compliance. Furthermore, the study recommends that government and co-operative development stakeholders to develop financial instruments tailored specifically for youth to alleviate capital constraints. Potential options may encompass seed grants aimed at addressing start-up costs, tailored soft credit facilities for youth-led co-operatives, and risk-sharing agreements involving development finance institutions and private sector entities. Moreover, the study recommends enhancing peer learning and collaboration within DSLAs and between DSLAs and formal co-operatives to strengthen collective competence and social capital. Example, establishing national and regional conferences, peer-to-peer exchange programs, and digital networking platforms to effectively facilitate intergroup information sharing and foster co-operative solidarity. Lastly, the study recommends the need for further research to examine scaling up models and policy frameworks that could facilitate the development of digital youth-led co-operatives in

Tanzania and across Africa. Accordingly, it is essential to conduct longitudinal studies to evaluate the sustainability, financial performance, and governance quality of youth-led co-operatives established through transitioned DISLAs. Comparative policy assessments are also essential for analysing and enhancing the regulatory frameworks that support digital youth-led co-operatives in Tanzania and throughout the African continent.

## REFERENCES

- Abdul N. P., Haque, M. I., Akhtar, S. J., & Banu, M. N. (2024). Methodological framework to define and measure “digital” financial inclusion. *International Journal of Financial Engineering*, 2450016.
- Adelaja, A. O., Umeorah, S. C., Abikoye, B. E., & Neziyana, M. C. (2024). Advancing financial inclusion through fintech: Solutions for unbanked and underbanked populations. *World Journal of Advanced Research and Reviews*, 23(01), 427-438.
- Agwu, M. E. (2021). Can technology bridge the gap between rural development and financial inclusions? *Technology Analysis & Strategic Management*, 33(2), 123-133.
- Aziz, A., & Naima, U. (2021). Rethinking digital financial inclusion: Evidence from Bangladesh. *Technology in Society*, 64, 101509.
- Block, P. J. (2022). Mobile money and financial resilience: overcoming economic shocks through digital financial technology.
- Feitosa, L., Mosconi, E., & Santa-Eulalia, L. A. (2022). Enterprise social media platforms for coping with an accelerated digital transformation. *Journal of Systems and Information Technology*, 24(3), 221-245.
- Gerlach, J. (2020). *Digitization Tendencies in the Traditional Financial Services Industry- Evidence on Changes, Consequences and Implications for the Traditional German Banking Sector* (Doctoral dissertation, Universitäts-und Landesbibliothek der Heinrich-Heine-Universität Düsseldorf).
- Jacolin, L., Keneck Massil, J., & Noah, A. (2021). Informal sector and mobile financial services in emerging and developing countries: Does financial innovation matter? *The World Economy*, 44(9), 2703-2737.
- Kiaga, A., & Leung, V. (2020). The transition from the informal to the formal economy in Africa. *Global Employment Policy Review, Background Paper*, 2.
- Liu, Y., Luan, L., Wu, W., Zhang, Z., & Hsu, Y. (2021). Can digital financial inclusion promote China's economic growth? *International Review of Financial Analysis*, 78, 101889.
- Mavlutova, I., Volkova, T., Natrins, A., Spilbergs, A., Arefjevs, I., & Miahkykh, I. (2020). Financial sector transformation in the era of digitalization. *Studies of Applied Economics*, 38(4).
- Metu, A. G., Ajudua, E., Eboh, I., Ukeje, C., & Madichie, C. (2020). Ending youth unemployment in sub - saharan Africa: Does ICT development have any role? *African Development Review*, 32, S20-S31.
- Mganyizi, R. (2023). *Analysis of the Contribution of Mobile Money on Financial Inclusion Growth in Tanzania* (Doctoral dissertation, The Open University of Tanzania).
- Mramba, N. R., & Msuya, M. S. (2024). Exploring the Usage of Digital Marketing among Selected Agricultural Marketing Co-operatives in Morogoro, Tanzania. *African Journal of Empirical Research*, 5(3), 934-947.

- Ngene, G., Pinet, M., Maclay, C., Phiona, S., & Tant, E. (2021). *Strengthening youth livelihoods and enterprise innovation in Africa's digital era*. ODI Working paper. London: ODI (<https://odi.org/en/publications/strengthening-youth-livelihoods-and-enterprise-innovation-in-africas-digital-era>).
- Ngowi, A. (2022). Digital Technology Potentials in the Fourth Industrial Revolution and the Development of Agricultural Marketing Co-operatives in Tanzania. Conference on Cooperatives and the Solidarity Economy. 03-04 November 2022, Johannesburg, South Africa | ISBN: 978-0-620-92748-2.
- Nyeko, K. E., Voon, M. L., Ngui, K. S., & Lim, T. Y. (2024). Financial Literacy, Access to Finance and Financial Performance of Youth-led Small and Medium-sized Enterprises (SMEs): Evidence from Gulu City, Uganda. *e-Academia Journal*, 13(2).
- Pakhnenko, O., Rubanov, P., Hacar, D., Yatsenko, V., & Vida, I. (2021). Digitalization of financial services in European countries: Evaluation and comparative analysis. *Journal of International Studies*, 14(2).
- Portes, A. (2024). Social capital: Its origins and applications in modern sociology. *New Critical Writings in Political Sociology*, 53-76.
- Rachmad, Y. E. (2025). Digital Financial Inclusion: How CBDCs Can Be the Solution. *The United Nations and the Nobel Peace Prize Awards*.
- Sadiku, A., Lesjak, D., Kohun, F., Pushavat, K., & Natek, S. (2022). Future of traditional banking and its digitalization. *Issues in Information Systems*, 23(3).
- Saz-Gil, I., Bretos, I., & Díaz-Foncea, M. (2021). Cooperatives and social capital: A narrative literature review and directions for future research. *Sustainability*, 13(2), 534.
- Slade Shantz, A. F., Kistruck, G. M., Pacheco, D. F., & Webb, J. W. (2020). How formal and informal hierarchies shape conflict within cooperatives: A field experiment in Ghana. *Academy of Management Journal*, 63(2), 503-529.
- Tafotie, R. (2020). Fostering Digital Financial Services in Africa: a case of embracing innovation for business and inclusion. *University of Luxembourg Law Working Paper*, (2020-005).
- Turkson, F. E., Amissah, E., & Gyeke-Dako, A. (2022). The role of formal and informal finance in the informal sector in Ghana. *Journal of Small Business & Entrepreneurship*, 34(3), 333-356.
- Valentinov, V., & Iliopoulos, C. (2021). Social capital in cooperatives: an evolutionary Luhmannian perspective. *Journal of Evolutionary Economics*, 31(4), 1317-1331.
- Wang, Y., Jiang, A., Zhang, S., & Chen, W. (2024). Traditional finance, digital finance, and financial efficiency: An empirical analysis based on 19 urban agglomerations in China. *International Review of Financial Analysis*, 96, 103603.
- Winstead, W. R., & Wells, J. T. (2022). African Youth Rising: The Emergence and Growth of Youth-Led Digital Enterprises in Africa. *The Palgrave Handbook of African Entrepreneurship*, 303-328.
- Yuen, S., & Tang, G. (2023). Instagram and social capital: youth activism in a networked movement. *Social Movement Studies*, 22(5-6), 706-727.
- Zambrano, A. F., Giraldo, L. F., Perdomo, M. T., Hernández, I. D., & Godoy, J. M. (2023). Rotating savings and credit associations: A scoping review. *World Development Sustainability*, 3, 100081.

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