



ADOPTION OF ICT TOOLS FOR INTERNAL COMMUNICATION IN NIGERIAN COOPERATIVE

Unigwe, Rosemary Ifeyinwa, Ph.D & Okika Nnaemeka

Ibinedion University, Okada, Edo State

ifeyinwa.rosemary@iuokada.edu.ng, okikia.nnaemeka@iuokada.edu.ng

Abstract

This chapter explores the adoption of Information and Communication Technology (ICT) tools for internal communication in Nigerian cooperative societies. Cooperatives remain essential vehicles for grassroots economic development, promoting savings, access to credit, and collective enterprise. However, traditional communication methods such as face-to-face meetings and printed notices often fall short in terms of timeliness, accessibility, and consistency, especially in rural and low-resource contexts. With the emergence of mobile phones, social media, email, and cooperative management software, ICT has become an increasingly vital tool for enhancing communication, transparency, and member engagement. Drawing from real-life case studies across four regions in Nigeria, this chapter highlights both the benefits and challenges of ICT integration in cooperatives. It also offers practical recommendations for policymakers, cooperative leaders, and development partners on how to strengthen ICT adoption through digital literacy programs, infrastructure investment, simplified tools, and inclusive strategies. The chapter argues that digital transformation in cooperatives must be intentional, inclusive, and tailored to context if it is to foster equitable participation and sustainable growth in Nigeria's cooperative sector.

Keywords: ICT, Communication, Nigeria, Information. Cooperatives

Introduction

Cooperative societies have long been pillars of grassroots economic empowerment and social development in Nigeria. Originating from both formal and informal mutual aid arrangements, cooperatives serve as critical platforms for individuals especially those in rural and low-income communities to pool resources, access credit, promote savings, and engage in group investments. They also play a significant role in fostering social capital, trust, and collective bargaining power among members (Chambo, 2009). In a country where the formal banking sector often excludes the poor and rural dwellers, cooperative societies have provided a lifeline for millions, helping to finance small businesses, pay school fees, invest in agriculture, and respond to household emergencies.

Despite their many benefits, the efficiency and impact of cooperatives depend largely on how well internal communication is managed. Communication within a cooperative society involves the flow of information between leaders, members, staff, and committees—ranging from meeting announcements and financial updates to training materials and urgent alerts. As cooperatives grow in size and complexity, maintaining open, transparent, and timely communication becomes increasingly essential. It enhances member participation, facilitates quicker decision-making,



builds trust in leadership, and ensures that all members are kept abreast of developments that affect them.

However, many Nigerian cooperatives still rely on traditional methods of communication, such as handwritten notices, physical meetings, and verbal announcements. While these approaches have served their purpose in the past, they are often inefficient and unsustainable in today's fast-paced environment. Face-to-face meetings, for example, may be difficult to organize regularly due to members' geographic dispersion, work schedules, or security concerns. Printed memos can be lost, delayed, or never received. Moreover, such methods are highly vulnerable to disruptions—whether due to health pandemics, transportation issues, or natural disasters—which can paralyze communication and stall cooperative activities.

In this context, the adoption of Information and Communication Technology (ICT) offers a compelling solution. ICT encompasses a broad range of tools and platforms that enable the storage, processing, and exchange of information electronically. These include mobile phones, text messaging services, email, social media platforms (such as WhatsApp and Facebook), digital financial services (like mobile money), and more recently, dedicated cooperative management applications and enterprise resource planning (ERP) systems. These tools are capable of transforming how cooperative societies communicate internally, making it possible to reach members instantly, share documents digitally, organize virtual meetings, and maintain permanent records of interactions and decisions.

Globally, the digital transformation of organizations has become a defining feature of modern governance and development. In Nigeria, too, digital tools are becoming increasingly embedded in daily life, even among rural populations, thanks to the rising penetration of mobile phones and internet services. Cooperative societies stand to benefit immensely from these trends if they can harness ICT appropriately. For example, mobile group chats can be used to coordinate meetings and share reports, while digital surveys can be deployed to collect member feedback or vote on important issues. Email and cloud-based platforms can improve recordkeeping and reduce administrative burden, while digital wallets and payment apps can streamline financial transactions and reduce errors in manual bookkeeping.

Nevertheless, the journey toward digital integration is not without its challenges. Issues such as limited ICT literacy, poor network infrastructure, high data costs, and resistance to change remain significant obstacles—particularly in rural cooperatives. This chapter, therefore, seeks to explore the current state of ICT adoption for internal communication in Nigerian cooperative societies. It will examine the various tools in use, the benefits and challenges encountered, and the strategies that can enhance digital inclusion and efficiency. Ultimately, it aims to provide a roadmap for strengthening communication and fostering innovation in the cooperative movement through the strategic use of ICT.

2. Conceptual Clarification



A clear understanding of the core concepts in this study Information and Communication Technology (ICT), internal communication, and cooperative societies is essential to ground the discussion of ICT adoption in Nigerian cooperative settings. These concepts are interrelated and central to how cooperative societies function, adapt, and thrive in the digital age.

Information and Communication Technology (ICT)

Information and Communication Technology (ICT) is a broad term that encompasses all technological tools and applications used to manage, process, store, and communicate information electronically. These include traditional technologies like telephones and radios, as well as modern digital tools such as mobile phones, email, the internet, social media, cloud computing, and enterprise resource planning (ERP) systems (UNESCO, 2019). ICT is not merely a tool of convenience but has evolved into a strategic asset that supports efficiency, transparency, and scalability in both public and private sectors. In the context of cooperative societies, ICT tools range from basic mobile phone calls and SMS services to more advanced tools like WhatsApp group chats, email newsletters, and digital financial applications. Some cooperatives especially urban or professionally managed ones have begun using software solutions specifically developed to support cooperative operations, such as membership databases, accounting platforms, voting systems, and digital loan tracking tools.

The integration of ICT into organizational communication has been associated with improved decision-making, real-time collaboration, and enhanced access to information (Laudon & Laudon, 2020). For cooperatives in Nigeria, where members often live in dispersed or rural areas, ICT tools bridge geographic gaps and provide continuous access to important updates and services. However, the effectiveness of ICT tools depends largely on factors such as availability, digital literacy, affordability, and institutional support.

Internal Communication

Internal communication refers to the process of exchanging information, instructions, ideas, and feedback among individuals and groups within an organization. It includes both formal communication (e.g., memos, reports, emails, and official meetings) and informal communication (e.g., chats, verbal updates, and social interactions) (Cornelissen, 2020). Internal communication ensures that members are aware of the organization's goals, activities, decisions, and expectations. It also plays a key role in motivating members, building a sense of belonging, resolving conflicts, and promoting transparency.

In cooperative societies, effective internal communication is essential due to their democratic structure and participatory decision-making processes. Unlike traditional hierarchical organizations, cooperatives rely on the active engagement and contributions of their members to function optimally. Members need timely access to information on savings, loan policies, dividend distribution, elections, and emergency decisions. Internal communication, therefore, is not just operational it is a pillar of cooperative governance. When internal communication breaks down, cooperatives risk facing misunderstandings, delayed decision-making, financial mismanagement,



and even member apathy or withdrawal. This is why the introduction of ICT tools such as group messaging apps, SMS broadcasts, email bulletins, and virtual meeting platforms can make a meaningful difference. These tools help reduce delays, minimize communication costs, and expand the scope of member participation, especially during emergencies or times when physical gatherings are impractical.

However, internal communication is not just about transmitting messages; it is also about building trust, clarity, and shared understanding among cooperative members. Therefore, the success of ICT-enabled internal communication depends not only on the availability of technology but also on how well it is used to facilitate meaningful, inclusive, and transparent dialogue.

Cooperative Societies

A cooperative society is an autonomous association of individuals who voluntarily unite to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise (International Cooperative Alliance [ICA], 2021). Cooperatives are founded on principles such as voluntary and open membership, democratic member control, member economic participation, and concern for community.

In Nigeria, cooperative societies are legally recognized and regulated under the Nigerian Cooperative Societies Act. They are classified into various types, including credit cooperatives, agricultural cooperatives, marketing cooperatives, consumer cooperatives, and multi-purpose cooperatives. While many are small and community-based, others operate on larger scales and engage in sophisticated financial, agricultural, and business operations. The primary goal of cooperatives is to empower members economically and socially. In many rural areas, cooperative societies fill critical gaps left by the formal financial system, such as access to credit, savings opportunities, and collective investment schemes. They also serve as vehicles for delivering government grants, agricultural subsidies, and donor-funded projects.

However, cooperative societies face numerous organizational challenges. These include limited administrative capacity, lack of formal training, poor recordkeeping, and communication breakdowns between executives and members. This is where the integration of ICT tools becomes particularly relevant. By digitizing communication processes and reducing dependency on manual systems, cooperatives can increase transparency, streamline operations, and build stronger connections among members. Moreover, the demographic landscape of Nigerian cooperative members is changing. Younger members, many of whom are digitally literate, are entering cooperatives with higher expectations for communication speed and digital access. This generational shift further compels cooperative leaders to adopt modern ICT tools to stay relevant and competitive.

Interrelationship of the Concepts

These three concepts ICT, internal communication, and cooperative societies are closely interconnected. Cooperative societies depend on internal communication to maintain transparency,



democracy, and participation. ICT tools serve as enablers that strengthen this communication, making it faster, cheaper, and more inclusive. However, the adoption of ICT in cooperatives must be context-sensitive, considering local infrastructure, digital literacy levels, and cultural attitudes toward technology. In the case of Nigeria, where digital inclusion remains uneven and rural-urban disparities are prominent, the adoption of ICT for internal communication must be accompanied by capacity-building and policy support. As this chapter will demonstrate, understanding these conceptual linkages is key to designing effective strategies for digital transformation in Nigerian cooperative societies.

3. Theoretical Framework

Understanding the adoption of Information and Communication Technology (ICT) tools for internal communication in Nigerian cooperative societies requires a robust theoretical lens. Two influential theories provide insights into how and why cooperative members and leaders choose to adopt or reject digital communication tools: the Technology Acceptance Model (TAM) and the Diffusion of Innovations (DOI) theory. These frameworks explain the dynamics of technology adoption in social and organizational settings, helping to illuminate the motivations, barriers, and strategies that influence ICT uptake in cooperatives.

Technology Acceptance Model (TAM)

The Technology Acceptance Model, developed by Davis (1989), is one of the most widely used models for explaining and predicting user behavior in relation to information systems. TAM is rooted in the theory of reasoned action and posits that two key beliefs determine an individual's intention to use a technology:

- Perceived Usefulness (PU): The degree to which a person believes that using a particular technology will enhance their performance or productivity.
- Perceived Ease of Use (PEOU): The degree to which a person believes that using the technology will be free of effort.

According to the model, when individuals perceive a technology to be both useful and easy to use, they are more likely to accept and adopt it. These perceptions influence the user's attitude toward the technology, which in turn shapes their behavioral intention and actual usage.

In the context of Nigerian cooperative societies, TAM helps to explain how members evaluate ICT tools such as WhatsApp, mobile banking apps, email, or cooperative management systems. For example, if a cooperative secretary believes that using a group messaging app will simplify coordination and save time, and if the app is easy to operate even for low-literate users, the likelihood of adoption increases. Conversely, if the tool appears complex or if members do not see clear benefits, resistance is likely.

Moreover, TAM has been expanded in subsequent research to include other variables such as social influence, facilitating conditions, and technological self-efficacy (Venkatesh & Davis, 2000).



These extensions are particularly relevant in cooperatives where peer recommendation, leadership endorsement, and access to training significantly shape members' willingness to engage with ICT.

Diffusion of Innovations (DOI) Theory

The second theoretical lens applied in this chapter is the Diffusion of Innovations theory developed by Everett Rogers (2003). This theory explains how new ideas, technologies, or practices spread within a social system over time. The model outlines five stages of the innovation-decision process:

1. **Knowledge:** Awareness of the innovation and understanding of how it functions.
2. **Persuasion:** Forming a favorable or unfavorable attitude toward the innovation.
3. **Decision:** Engaging in activities that lead to a choice to adopt or reject the innovation.
4. **Implementation:** Putting the innovation into use.
5. **Confirmation:** Seeking reinforcement of the adoption decision and evaluating outcomes.

Rogers identifies five characteristics of innovations that affect their rate of adoption:

- **Relative Advantage:** The degree to which an innovation is perceived as better than the idea it replaces.
- **Compatibility:** The extent to which the innovation is consistent with existing values, past experiences, and needs of potential adopters.
- **Complexity:** The degree to which an innovation is perceived as difficult to understand or use.
- **Trialability:** The ability to experiment with the innovation on a limited basis.
- **Observability:** The extent to which the results of the innovation are visible to others.

DOI is particularly useful in explaining the gradual and uneven spread of ICT tools among Nigerian cooperatives. For example, urban cooperatives with younger, tech-savvy members may adopt mobile money apps quickly due to their relative advantage and compatibility with mobile lifestyles. In contrast, rural cooperatives may resist new tools due to complexity, lack of trialability, or the absence of observable success stories.

The role of opinion leaders such as cooperative presidents, secretaries, or extension agents is also emphasized in DOI theory. These individuals often influence other members by modeling the use of new ICT tools, thereby accelerating diffusion within the group. In many Nigerian cooperatives, change agents from government or NGOs also play a vital role in facilitating ICT adoption by providing training, technical support, and success demonstrations.

Relevance of the Theories to Nigerian Cooperatives



Together, TAM and DOI offer complementary insights. TAM focuses on the individual-level perceptions and attitudes toward ICT tools, while DOI explores the social and systemic dynamics of technology spread. In Nigerian cooperatives, both individual beliefs (such as ease of use) and collective processes (such as leadership influence and trial opportunities) determine whether an ICT tool will be adopted for internal communication. For instance, a cooperative member may find a mobile app useful and easy to use (TAM), but still not adopt it if the rest of the group does not see its value or if network connectivity is poor (DOI). Similarly, a tool may be compatible and advantageous at the organizational level (DOI), but may still fail if members are not trained to use it effectively (TAM).

Applying these frameworks to Nigerian cooperatives helps to identify leverage points for policy intervention, training, and system design. It highlights the need to consider both technical usability and social readiness when promoting digital communication tools.

4. ICT Tools Commonly Used in Nigerian Cooperatives

The adoption of Information and Communication Technology (ICT) tools by cooperative societies in Nigeria is growing, although it varies significantly based on location, organizational structure, digital literacy, and leadership vision. Internal communication within cooperatives refers to the sharing of information, updates, instructions, and feedback among members, executives, and subcommittees. The ICT tools adopted for this purpose range from basic mobile phones to sophisticated management software. This section explores the major ICT tools currently in use among Nigerian cooperatives, their purposes, accessibility, and limitations.

Mobile Phones (Calls and SMS)

The most widely used ICT tool in Nigerian cooperatives is the mobile phone. Due to its affordability and ubiquity, mobile telephony through both voice calls and short message service (SMS) serves as a foundational tool for internal communication. It enables cooperative leaders to communicate meeting reminders, loan repayment schedules, or emergency updates to members who may live in remote areas.

According to the Nigerian Communications Commission (NCC, 2023), Nigeria has over 200 million active mobile subscriptions, indicating deep mobile penetration even in rural communities. Cooperatives often maintain a list of members' phone numbers and rely on direct calls or group SMS blasts for mobilization. While SMS is less interactive than other platforms, it is accessible on all phone types and does not require internet access, making it ideal for cooperatives with low-income or elderly members. However, challenges with this method include the cost of bulk SMS services, limitations in message length, and the lack of engagement features that support two-way communication or media sharing.

WhatsApp and Other Messaging Apps



WhatsApp has rapidly become one of the most popular platforms for cooperative communication. It supports both real-time chat and asynchronous communication, allowing members to send and receive messages, documents, voice notes, and images at their convenience. WhatsApp groups are used for multiple purposes: distributing minutes of meetings, coordinating loan disbursement updates, sharing government policy changes, and posting reminders.

The platform's end-to-end encryption and wide adoption among smartphone users make it a preferred tool, especially in urban and semi-urban cooperatives. Some cooperatives even create separate WhatsApp groups for executive members, loan officers, and general members to streamline communication. Telegram and Facebook Messenger are also used in a few cases, particularly where members prefer those platforms or where more structured channels (e.g., Telegram channels) are needed. Nevertheless, the effectiveness of these apps is tied to internet access, data affordability, and smartphone ownership, which remain limitations in rural settings (GSMA, 2022).

Email Communication

Email remains a relevant but underutilized tool in most grassroots cooperatives in Nigeria. It is more common in professionally run cooperatives, such as those formed by civil servants, academic institutions, or large trade associations. Email is valued for its formal tone, document storage capabilities, and traceability. It is used to send official notices, loan agreements, financial reports, and policy documents.

However, for most rural cooperatives with low literacy levels or limited access to computers and internet-enabled devices, email is less practical. In addition, members often check emails less frequently than mobile messaging apps, which diminishes its immediacy and engagement potential.

Video Conferencing Platforms (Zoom, Google Meet)

The COVID-19 pandemic triggered a growing awareness of video conferencing tools among Nigerian cooperatives, particularly those located in urban areas. Platforms like Zoom and Google Meet enabled virtual Annual General Meetings (AGMs), executive planning sessions, and training workshops. For cooperatives with members across states or in diaspora, virtual meetings became a strategic tool for ensuring inclusivity and continuity. These platforms support screen sharing, recording, and real-time collaboration. However, their effectiveness depends heavily on internet connectivity, data cost, and digital skills. Many cooperatives still prefer physical meetings due to network instability and the learning curve associated with navigating video platforms.

Digital Financial Platforms and Mobile Money

While not traditionally classified as communication tools, mobile banking apps, mobile money platforms (e.g., Opay, Paga), and USSD codes have become vital channels for financial communication in cooperatives. These tools enable members to check balances, receive payment confirmations, and monitor loan repayments. Some cooperatives have integrated mobile banking



with communication updates such as SMS alerts or app notifications thus merging financial services with internal information flow.

As digital financial services expand, cooperatives that adopt these tools enjoy faster transaction times, increased transparency, and reduced fraud. Nonetheless, there remains a trust gap among older members unfamiliar with digital banking, along with infrastructural limitations in underserved regions.

Cooperative Management Software and Enterprise Platforms

In recent years, several Nigerian cooperatives have started exploring digital platforms specifically designed for managing cooperative operations. Examples include CoopMIS, Mobicoop, and CoopBanker. These platforms integrate communication tools with member databases, savings and loan modules, report generation, and real-time notifications.

These systems help cooperative executives streamline administrative tasks, reduce paperwork, and enhance accountability. Some platforms allow members to log in to view their contributions, apply for loans, or access financial statements. Communication features such as automated SMS alerts, dashboards, and online bulletin boards are also embedded in these platforms. However, adoption remains limited due to cost, complexity, and low technical capacity. Cooperatives need external support, such as donor grants or government subsidies, to afford these tools and train members on their usage.

Social Media Pages and Websites

Although less common, some large or urban-based cooperatives maintain a Facebook page, Twitter account, or even a simple website. These are mainly used for external communication, such as promoting cooperative activities, attracting new members, or posting updates. Internally, they may also be used to share AGM highlights, executive committee announcements, or educational content. Nevertheless, managing a digital presence requires dedicated personnel, technical skills, and consistency resources that many grassroots cooperatives lack.

5. Factors Influencing Adoption of ICT Tools in Nigerian Cooperatives

While Information and Communication Technology (ICT) tools present significant opportunities for improving internal communication in cooperative societies, their adoption is not uniform across Nigeria. Several interrelated factors technological, human, organizational, cultural, and environmental determine the extent to which cooperatives embrace or resist ICT tools. Understanding these factors is essential for designing effective interventions, supporting cooperative transformation, and promoting inclusive digital engagement.

Digital Literacy and Educational Background

Digital literacy is a foundational determinant of ICT adoption. It refers to the ability to effectively use digital tools, navigate applications, interpret data, and communicate in a digital environment



(UNESCO, 2019). In many Nigerian cooperatives, especially those located in rural areas, the educational levels of members are relatively low, and familiarity with digital platforms is limited. While some members may be comfortable using basic mobile phones for calls or SMS, they may find it difficult to operate smartphones, install apps, or navigate user interfaces on platforms like WhatsApp, Zoom, or email.

Cooperative leaders who lack digital competence may also struggle to coordinate communication using ICT. This often results in overreliance on traditional face-to-face meetings or printed circulars. Moreover, older members tend to exhibit higher resistance to digital tools compared to younger, tech-savvy members, thus creating a generational gap in communication practices.

Efforts to improve ICT adoption, therefore, must include structured digital literacy training customized to members' literacy levels and ongoing technical support.

Accessibility of ICT Infrastructure

Access to reliable ICT infrastructure remains a critical barrier. Although Nigeria has made significant progress in mobile network expansion, large portions of rural communities still suffer from poor or unstable internet connectivity, erratic electricity supply, and insufficient telecom coverage (World Bank, 2021). This directly limits the ability of cooperatives to use internet-dependent tools such as email, cloud-based storage, Zoom, or cooperative management software.

Even when mobile network coverage is available, the cost of data subscriptions and mobile phone devices (especially smartphones) is often prohibitive for low-income members. Additionally, the poor state of rural road networks affects the distribution and maintenance of ICT hardware such as modems, solar panels, and computer systems.

To ensure equitable ICT adoption, there is a need for public-private investment in infrastructure and access-enabling policies, including subsidized internet services and solar-powered digital centers in cooperative communities.

Cost and Affordability

Cost is a major determinant of ICT usage among cooperatives. This includes both the initial cost of acquiring digital devices (e.g., smartphones, laptops, routers) and the recurring costs of data subscriptions, software licenses, device repairs, and ICT training. Most cooperatives operate on limited budgets and depend heavily on member contributions. Allocating funds to digital tools may seem secondary compared to pressing needs such as loan disbursement, member welfare, or office space.

Moreover, where digital platforms are perceived as expensive or complex, cooperatives may prefer lower-cost alternatives such as WhatsApp or SMS. Even these, however, carry data or airtime costs that not all members can afford regularly.



To encourage uptake, cooperative federations, NGOs, and government agencies should consider providing cost-sharing schemes, digital grants, or community-based technology access models (such as shared devices or digital hubs).

Leadership Commitment and Vision

Leadership plays a pivotal role in whether or not ICT tools are adopted within a cooperative. Cooperative executives particularly the president, secretary, treasurer, and information officer act as gatekeepers for change. If they possess a clear vision, embrace innovation, and actively promote the use of digital tools, adoption becomes much more likely.

Conversely, where leaders are resistant to change, lack interest in digital tools, or fear losing control due to increased transparency, ICT adoption is often stalled. Leaders who monopolize communication or fear member empowerment through open channels may deliberately avoid tools like group chats or shared dashboards.

Therefore, fostering transformational leadership that is, leadership committed to learning, innovation, and digital inclusion is essential. Leadership training programs that integrate ICT awareness and change management can serve as catalysts for digital transformation in cooperative societies.

Organizational Culture and Structure

The internal culture of a cooperative influences how readily new technologies are accepted. Organizations with a hierarchical and rigid communication style may struggle to adopt participatory ICT tools that require open sharing and feedback. In contrast, cooperatives with a more collaborative and transparent culture tend to be more adaptive to digital innovations.

Additionally, the presence of dedicated roles such as a communications officer, ICT coordinator, or digital secretary can facilitate smooth implementation of ICT tools. Cooperatives with clear information flow structures, regular meetings, and documentation practices are more likely to integrate ICT successfully.

Where cooperative societies are fragmented, informal, or lacking functional committees, introducing ICT tools without addressing foundational structural issues may yield poor results.

Policy Environment and Institutional Support

The policy landscape and institutional support mechanisms significantly affect ICT adoption. While the Nigerian government has initiated policies aimed at digital inclusion—such as the National Digital Economy Policy and Strategy (NDEPS) cooperatives are rarely the direct focus of such initiatives (Federal Ministry of Communications and Digital Economy, 2020).



Similarly, state and local cooperative departments often lack the capacity or funding to drive ICT training or digital resource provision for cooperatives. In some regions, cooperative officers are themselves unfamiliar with modern ICT tools.

Greater collaboration is needed between government agencies, cooperative federations, NGOs, and ICT service providers to design cooperative-specific digital transformation programs, policy frameworks, and regulatory incentives.

Peer Influence and Social Norms

The adoption of ICT tools in cooperatives is often influenced by peer learning and social validation. According to Rogers' (2003) Diffusion of Innovations theory, individuals are more likely to adopt an innovation when they observe peers or opinion leaders successfully using it. In cooperatives, this may include executive members who introduce WhatsApp communication, younger members who assist older ones with mobile banking, or sister cooperatives that demonstrate best practices in digital communication.

When early adopters within a cooperative set positive example such as resolving issues faster through group chats or reducing meeting costs through Zoom other members gradually buy in. However, if ICT use is associated with elitism, complexity, or exclusion, adoption is likely to be resisted.

Hence, fostering a culture of shared learning, inclusiveness, and peer mentorship is crucial for building confidence and sustained ICT usage.

6. Benefits of ICT Adoption in Nigerian Cooperatives

The integration of Information and Communication Technology (ICT) into cooperative societies' internal communication systems has brought about notable improvements in organizational efficiency, transparency, participation, and overall productivity. While challenges remain, the benefits of ICT adoption are increasingly evident across many cooperatives in Nigeria especially those that have embraced innovation and digital engagement. This section outlines the key advantages that ICT tools offer to cooperative societies in their quest for growth, inclusiveness, and sustainability.

Improved Speed and Timeliness of Communication

One of the most immediate benefits of ICT adoption is the enhanced speed of information dissemination. Traditional communication methods such as physical meetings, notice boards, and printed memos are often subject to delays, logistical bottlenecks, and limited reach. ICT tools particularly mobile phones, SMS, and instant messaging platforms like WhatsApp enable cooperative leaders to share updates with members instantly, regardless of location.

For example, a loan committee can use a WhatsApp group to schedule an emergency meeting, send reminders about payment deadlines, or share documents in real time. Such tools eliminate the



need for travel or printed materials, thereby speeding up decision-making and improving the responsiveness of cooperative management.

Timely communication also enhances operational efficiency by reducing lags in financial reporting, project implementation, and crisis response particularly important in cooperatives that handle multiple member transactions or seasonal farming cycles.

Greater Transparency and Accountability

Transparency is a core principle of cooperative governance. ICT tools help strengthen transparency by creating clear communication channels and digital trails that can be referenced at any time. Platforms like email, group messaging apps, and cooperative management systems allow for the regular circulation of financial reports, meeting minutes, audit findings, and policy updates.

The availability of such information fosters accountability, as members can verify decisions, question inconsistencies, and demand explanations based on written records. In many cooperatives where trust issues or suspicions of mismanagement have previously hindered member engagement, the ability to access digital records or participate in virtual discussions has been transformational.

Additionally, digital platforms discourage gatekeeping behavior by leaders who might otherwise manipulate or withhold information. When properly used, ICT tools enable all members regardless of status or geography to stay informed and involved in cooperative affairs.

Enhanced Member Engagement and Participation

ICT tools can significantly improve member engagement, especially in large cooperatives or those with members dispersed across rural and urban locations. Digital platforms break down geographic and temporal barriers, allowing members to contribute to discussions, vote on key issues, or access resources without needing to be physically present.

For example, cooperatives may use Google Forms or WhatsApp polls to conduct member surveys, solicit feedback, or organize virtual elections. This enhances inclusivity and ensures that decisions reflect the collective will of the membership, in line with cooperative democratic principles.

Moreover, younger members who are often more digitally active are more likely to engage when communication is conducted through modern platforms. This has the added benefit of bridging generational divides and renewing interest in cooperative activities among youth, who may otherwise view cooperatives as outdated institutions.

Improved Record-Keeping and Information Management

A major operational advantage of ICT adoption is the improvement of record-keeping and document management. Manual systems such as paper-based ledgers, meeting minutes notebooks, and printed receipts are prone to loss, damage, errors, and manipulation. Digital platforms offer more secure, searchable, and organized alternatives.



Cooperative software and cloud storage systems allow cooperatives to maintain accurate member records, monitor savings and loan histories, and archive decisions for future reference. These systems reduce administrative burden and support continuity during leadership transitions, audits, or reporting exercises.

Even simple tools like Excel spreadsheets, Google Drive folders, and email archives contribute to better documentation and retrieval of information. This becomes especially useful when applying for government grants, donor funds, or regulatory compliance certifications, which often require verifiable documentation.

Cost Reduction and Operational Efficiency

Though initial ICT investments may require capital outlay, digital tools often lead to long-term cost savings and improved efficiency. For example, using WhatsApp to share meeting notices or monthly financial summaries is far cheaper than printing and distributing hard copies. Similarly, organizing virtual meetings reduces the cost of renting venues, providing refreshments, or transporting members.

Moreover, ICT tools automate many administrative processes such as dues collection notifications, reminders for loan repayments, or generation of financial summaries thus reducing human error and saving staff time.

In the long run, the reduction in administrative overhead and logistical expenditures contributes to better financial management and allows cooperative funds to be redirected toward productive investments or member benefits.

Better Coordination of Cooperative Activities

Cooperative societies often manage multiple activities simultaneously—ranging from financial services to agricultural marketing and social projects. ICT tools help coordinate these activities more effectively by providing platforms for information sharing, scheduling, reporting, and collaboration.

For example, cooperative subcommittees (such as credit, education, or welfare committees) can use dedicated communication groups or shared calendars to organize their functions independently while staying aligned with the executive leadership. Digital dashboards and task trackers can also help monitor progress and accountability.

In multi-branch cooperatives, ICT tools enable central coordination while preserving local autonomy. Each unit can report activities digitally while the central office maintains oversight and integrates information for unified decision-making.

Strengthened Member Trust and Organizational Credibility



When communication is consistent, transparent, and responsive, members are more likely to trust their cooperative leadership. This trust is vital for member retention, voluntary contributions, and long-term loyalty. ICT-enabled communication creates an environment where members feel heard, respected, and empowered to contribute, thus enhancing cooperative solidarity.

Furthermore, cooperatives that maintain a strong digital presence through websites, social media, or mobile apps gain public visibility and credibility. This can attract new members, establish relationships with external partners, and build the cooperative's reputation as a modern and forward-thinking institution.

7. Challenges to ICT Adoption in Nigerian Cooperatives

While Information and Communication Technology (ICT) offers a promising pathway for transforming internal communication in Nigerian cooperative societies, its adoption is often fraught with multifaceted challenges. These challenges vary by context urban versus rural, formal versus informal cooperatives, and literacy levels among members but they ultimately constrain the ability of cooperatives to harness the full potential of digital communication. This section outlines the primary obstacles hindering the successful uptake and integration of ICT tools in Nigerian cooperatives.

Low Digital Literacy and Technological Skills

One of the most persistent challenges facing cooperatives is the low level of digital literacy among members and leadership. Many cooperative members, especially in rural areas, have limited experience using digital devices or applications beyond basic phone calls and text messaging. The ability to use smartphones, install apps, access email, or navigate financial platforms is often taken for granted in urban contexts but remains a barrier for many grassroots participants (UNESCO, 2019).

Even among cooperative executives, digital competence is inconsistent. Inadequate skills prevent leaders from effectively managing digital communication platforms, utilizing cooperative software, or leveraging social media tools. As a result, digital tools are either underused or misapplied, leading to frustration, errors, and resistance.

Without sustained investment in digital training and ICT orientation programs, even cooperatives that acquire the right tools may struggle to use them effectively.

Infrastructure Limitations

Poor ICT infrastructure significantly impedes digital communication efforts. Many rural parts of Nigeria suffer from unreliable electricity, weak mobile network coverage, and slow or unaffordable internet access. According to the World Bank (2021), while mobile network coverage has expanded in Nigeria, the quality of service in rural and underserved communities remains low, resulting in frequent signal drops, low bandwidth, and high latency.



Electricity challenges further exacerbate the problem. Power outages make it difficult to charge phones or run digital devices regularly, creating a dependency on alternative energy sources such as generators or solar panels both of which require capital investment.

Moreover, the cost of internet data and mobile devices remains high relative to average income levels in many cooperative communities. These infrastructure-related barriers result in inconsistent communication and discourage cooperatives from relying on digital systems as their primary mode of engagement.

Financial Constraints

ICT adoption comes at a cost, and many cooperatives lack the financial capacity to procure and sustain the use of digital tools. Expenses such as smartphones, computers, software subscriptions, internet data, ICT training, and technical support can place a heavy burden on cooperatives that already operate on tight budgets.

For example, subscribing to cooperative management platforms like CoopMIS or hosting Zoom meetings requires regular funding. Likewise, creating and maintaining a website or digital archive demands both technical expertise and financial investment.

Since most cooperative societies prioritize loan disbursement, savings mobilization, or member welfare over digital investments, ICT is often relegated to a secondary priority. This budgetary limitation creates a digital divide where only well-funded, urban-based cooperatives can afford comprehensive digital solutions while rural and informal cooperatives remain left behind.

Resistance to Change and Cultural Barriers

Another common obstacle is resistance to change, which is often rooted in cultural practices, age-related bias, or fear of the unknown. Some cooperative leaders and members may perceive ICT tools as unnecessary, elitist, or even disruptive to traditional processes. In cooperatives with strong interpersonal cultures, face-to-face meetings and verbal communication are seen as more trustworthy than impersonal digital communication.

Older members, in particular, may feel alienated by digital platforms and be reluctant to participate in WhatsApp groups, virtual meetings, or app-based voting systems. This can create internal divisions within cooperatives and complicate efforts to implement digital innovations equitably.

Moreover, some members associate ICT tools with surveillance or loss of control, especially when they enable greater transparency and recordkeeping. As a result, they may resist the use of such tools to protect their status or avoid accountability.

Change management strategies that emphasize inclusion, gradual integration, and peer support are therefore necessary to overcome resistance and foster collective digital buy-in.

Lack of Institutional and Policy Support



Despite the central role of cooperatives in Nigeria's grassroots economy, institutional support for digital transformation in the sector is weak. Most state cooperative departments lack the funding, personnel, or technical capacity to guide cooperatives on ICT usage or provide standardized digital tools.

National ICT policies such as the *National Digital Economy Policy and Strategy (NDEPS)* focus more broadly on digital inclusion, education, and e-government but do not address the unique needs of cooperative societies (Federal Ministry of Communications and Digital Economy, 2020). There are no specific government-funded programs targeting digital training, cooperative software development, or subsidized ICT access for cooperatives.

This policy vacuum leaves cooperatives to fend for themselves or depend on NGO interventions that are often limited in scope and sustainability. The absence of regulatory incentives or guidance also means that ICT integration is inconsistent and fragmented across the sector.

Trust Issues and Cybersecurity Concerns

As cooperatives begin using digital platforms for financial transactions, data storage, and communication, concerns around security and privacy are emerging. Some members fear that using mobile banking, online voting, or cloud storage may expose them to fraud, hacking, or identity theft.

Past experiences with mobile money scams, email fraud, or unauthorized access to cooperative funds have made some societies skeptical of digital platforms. Without proper cybersecurity education and secure infrastructure, these concerns discourage ICT adoption.

Additionally, poorly designed platforms or lack of encryption can compromise member data, eroding trust in the cooperative's digital system. This makes it imperative for cooperatives to adopt secure ICT solutions and engage in continuous cybersecurity awareness.

Language and Literacy Barriers

Nigeria is a linguistically diverse country, and many cooperative members—especially in rural areas speak only local languages or have limited formal education. Most ICT tools, applications, and training materials are presented in English or require basic reading proficiency.

This creates communication barriers, as members may not understand app interfaces, email instructions, or virtual meeting protocols. The lack of ICT tools in indigenous languages further limits adoption and reinforces digital exclusion.

To overcome this, developers and cooperative leaders need to prioritize language localization, use voice-based apps or videos, and simplify user interfaces to accommodate all literacy levels.

Case Illustration: Egbe Progress Cooperative, Ogun State



Egbe Progress Cooperative Society, located in Ifo Local Government Area of Ogun State, Nigeria, offers a compelling example of how a mid-sized rural cooperative can gradually adopt ICT tools to strengthen its internal communication and overall operational efficiency. Established in 2007 with 45 members mostly farmers, petty traders, and artisans Egbe Progress Cooperative has grown to over 120 active members by 2024. Its evolution in digital communication practices reflects both the opportunities and challenges faced by grassroots cooperatives navigating the digital age.

Background and Organizational Setup

Egbe Progress Cooperative began with traditional communication methods: face-to-face monthly meetings, handwritten records, and physical notices posted at the local town hall. Communication was often delayed, and members who traveled or relocated temporarily missed key updates. This led to frequent miscommunication, late loan repayments, and declining participation in group projects.

In 2018, under the leadership of its then-new president, Mrs. Felicia Oyelade, the cooperative embarked on a gradual digital transition. Recognizing the limitations of the manual system, she proposed the use of mobile phones and group messaging apps to improve communication flow and transparency.

ICT Tools Adopted

1. WhatsApp Group Communication:

The first major step was creating a WhatsApp group for all members who owned smartphones. This became the primary channel for:

- Announcing meeting dates and times
- Sharing minutes and resolutions
- Reminding members of loan repayment deadlines
- Circulating photos of cooperative projects (e.g., cassava processing shed, goat farm)

To ensure inclusion, younger members helped elderly members set up WhatsApp or shared updates with them verbally.

2. SMS for Non-Smartphone Users:

For the 30% of members who lacked smartphones, the cooperative adopted a bulk SMS platform through a local ICT vendor. This service was used to send short but essential updates such as:

- AGM reminders
- Financial obligations
- New membership approvals



3. Use of Email for Executive Correspondence:

Executive members including the president, treasurer, and secretary began using email to exchange scanned documents, send reports to the Ogun State Cooperative Department, and correspond with partner organizations. This introduced a more formal and traceable communication line for administrative matters.

4. Adoption of a Basic Digital Ledger App:

In 2022, with support from a local NGO, the cooperative introduced a simplified bookkeeping app called *CoopCash*, developed by a Nigerian tech startup. The app, operated by the financial secretary, helped in tracking member contributions, generating receipts, and providing digital loan histories.

Observed Benefits

- **Faster Information Flow:** Members now receive information instantly, rather than waiting for monthly meetings or printed notices.
- **Improved Participation:** Meeting attendance rose from 60% to 85%, with more members actively contributing to discussions, both online and in-person.
- **Greater Transparency:** Members can now view financial updates and ask questions via WhatsApp, reducing suspicion and gossip.
- **Reduced Operational Costs:** The need for printed materials and frequent travel for minor updates decreased significantly.
- **Crisis Communication:** During the COVID-19 lockdown, the WhatsApp group allowed leaders to coordinate palliative distribution and provide safety information, ensuring no member was left out.

Challenges Encountered

- **Digital Literacy Gap:** Some elderly members struggled with smartphones and relied on others for updates, creating occasional delays and dependence.
- **Data and Electricity Costs:** High data costs and irregular power supply limited how often members engaged online.
- **Network Downtime:** Mobile network disruptions affected real-time updates, especially during storms or regional outages.
- **App Maintenance:** The Coop Cash app occasionally faced bugs, and the cooperative had to hire an external technician for troubleshooting.

Mitigation Strategies



- Monthly ICT workshops were introduced to help less tech-savvy members.
- The cooperative negotiated a discount with a local mobile provider for bulk data bundles.
- Printed summaries of digital discussions were occasionally circulated for transparency.
- The cooperative earmarked ₦5,000 monthly from administrative dues to fund ICT operations and software support.

Lessons Learned

The Egbe Progress Cooperative case illustrates that:

- Digital tools can be adopted even in rural, low-income cooperatives with the right leadership and member orientation.
- WhatsApp and SMS are highly effective low-cost tools for grassroots internal communication.
- Sustainable ICT adoption requires ongoing training, a budget line for tech maintenance, and inclusive strategies that consider both literate and semi-literate members.

Case Illustration 2: Unity Women Multipurpose Cooperative, Enugu State

Overview:

Unity Women Multipurpose Cooperative Society (UWMCS), based in Nsukka, Enugu State, is a women-led rural cooperative focused on agro-processing, microcredit, and household savings. It was founded in 2012 with 37 women and has grown to 95 active members by 2023. The cooperative operates primarily among female traders, farmers, and widows.

ICT Tools and Innovations:

- **Mobile Money Integration:** In 2019, UWMCS partnered with a local fintech company to introduce mobile money platforms (e.g., *Paga* and *OPay*) for internal savings and loan repayments. Members were trained to send weekly savings via USSD codes using basic phones.
- **Interactive Voice Messaging (IVM):** Recognizing that many members were semi-literate, the cooperative adopted an IVM service that allows leadership to send pre-recorded voice messages in Igbo. These messages contain reminders about meetings, loan deadlines, and empowerment workshops.
- **WhatsApp Audio Sharing:** For members with smartphones, short audio recordings of meeting summaries and financial updates were sent via WhatsApp to improve comprehension.

Impacts:



- **Higher Financial Inclusion:** 72% of members began using mobile money services by mid-2021, reducing the risk of cash loss and enabling faster financial transactions.
- **Better Inclusion of Low-Literate Members:** Voice-based messaging improved accessibility for women who previously struggled to engage with printed memos.
- **Enhanced Leadership Visibility:** Executive members used WhatsApp status updates to show project milestones and funding successes, strengthening member trust.

Challenges:

- Lack of consistent electricity in villages delayed phone charging and message delivery.
- Some fintech agents delayed withdrawals or overcharged for services.

Key Lesson:

ICT adoption must consider the linguistic and literacy realities of rural women. By using voice and vernacular communication, cooperatives like UWMCS achieve better inclusion and responsiveness.

Case Illustration 3: Progressive Youth Cooperative, Kano State

Overview:

Progressive Youth Cooperative is an urban-based cooperative located in Kano city. Established in 2016 by a group of unemployed graduates and artisans, it focuses on digital entrepreneurship, technical skill training, and cooperative finance. The membership consists mostly of youths aged 18–35.

ICT Tools and Innovations:

- **Google Workspace Integration:** The cooperative uses Google Docs, Sheets, and Forms to share reports, track attendance, and collect member opinions on new initiatives.
- **Telegram Channel:** Due to WhatsApp's participant limit, the cooperative migrated to Telegram, which allows up to 200,000 members and file sharing without compression.
- **Zoom for Virtual Training:** Progressive Youth hosts monthly webinars and digital skill sessions via Zoom and Google Meet to train members on topics such as coding, forex, and digital marketing.
- **Custom Web Portal:** In 2022, a member-developed portal was launched, allowing users to log in, update savings records, and generate personal account summaries.

Impacts:

- **Digital Skill Enhancement:** Over 60% of members acquired at least one new digital skill, increasing their income opportunities.



- **Transparent Operations:** Members could monitor their cooperative accounts in real-time, boosting trust and engagement.
- **Remote Participation:** Diaspora members remained actively involved, voting and contributing via digital tools.

Challenges:

- Internet costs remain high for low-income youth.
- Some tools like Google Forms required regular re-training for new users.
- Occasional phishing attacks led to a stronger focus on digital security.

Key Lesson:

Youth-led cooperatives can serve as early adopters of sophisticated digital tools. However, continuous capacity building and cybersecurity awareness are essential to maintain digital trust.

Synthesis of Lessons Across Cases

Case	Key Tools Used	Unique Adaptation	Main Outcome
Egbe Progress Cooperative, Ogun	WhatsApp, bulk SMS, email, CoopCash app	Blending low-tech and digital tools	Faster, transparent communication
Unity Women Cooperative, Enugu	Mobile money, voice messaging, WhatsApp audio	Vernacular and voice-based tools for rural women	Improved financial inclusion and access
Progressive Youth Cooperative, Kano	Google tools, Zoom, Telegram, custom portal	Web-based automation and digital skills training	Strong youth engagement and real-time access

Case Illustration 4: Tiv Farmers' Cooperative Union, Benue State

Overview:

The Tiv Farmers' Cooperative Union (TFCU), headquartered in Gboko, Benue State, is a large agrarian cooperative with over 300 registered members engaged in yam, cassava, and rice farming. The cooperative was established in 2009 to pool resources, access government interventions, and enhance market access for smallholder farmers. The union has multiple satellite groups across three local governments.

ICT Tools and Communication Strategy:



1. Radio and SMS Broadcasts:

Due to the wide geographical spread of members and inconsistent mobile network coverage, the cooperative partnered with a local radio station (*Harvest FM Makurdi*) to air weekly bulletins about cooperative updates, market prices, and weather forecasts. This was complemented by SMS alerts using *FrontlineSMS*—a free, open-source bulk SMS platform to reach members in remote villages.

2. Interactive WhatsApp Groups by Zone:

Instead of one large group, TFCU created zonal WhatsApp groups (e.g., Gboko, Buruku, and Katsina-Ala) to reduce message overload and improve coordination within each area. Zonal leaders would forward key summaries from central leadership to their groups, enabling a decentralized but synchronized communication system.

3. Mobile Photography for Field Reports:

Agricultural extension workers within the union began using smartphones to take photos of crop diseases, pest infestations, and flooding incidents. These were shared via WhatsApp with the union's technical team and, in some cases, uploaded to the *Nigeria Agro-Extension Network (NAEN)* portal for expert advice.

Impacts:

- **Timely Agricultural Support:** Farmers received real-time updates on rainfall patterns and pest alerts, helping them plan activities better.
- **Decentralized Coordination:** Zonal WhatsApp groups improved ownership at the grassroots level and reduced delays in communication.
- **Evidence-Based Reporting:** Photo reports allowed the union to apply for intervention support from agricultural agencies and NGOs with proof of need.

Challenges:

- Limited smartphone ownership among older farmers, requiring reliance on zonal leaders or youth.
- Dependence on local radio meant updates were subject to airtime availability and sponsorship costs.
- Extension officers needed support for device maintenance and data purchase.

Mitigation and Innovation:

- Younger cooperative members were assigned as "*digital liaisons*" to assist less tech-savvy elders.



- The cooperative allocated part of its annual surplus to fund airtime and bulk SMS services.
- They began exploring voice assistant apps (like Viamo's 321 service) for agricultural tips in Tiv language.

Key Lesson:

In agriculture-focused cooperatives, combining traditional tools like radio with mobile-based platforms allows for wide coverage and relevance. Decentralized communication structures empower local leadership and improve responsiveness to urgent needs.

Final Thoughts on Case Studies

These four cases ranging from women's cooperatives in Enugu to youth-led cooperatives in Kano, to large agricultural groups in Benue illustrate the diversity and adaptability of ICT integration in Nigerian cooperatives. Each cooperative has tailored ICT tools to its membership base, literacy levels, and communication needs, revealing that there is no one-size-fits-all approach. However, common success factors across the cases include:

- Strong leadership with digital vision
- Youth involvement in ICT facilitation
- Context-sensitive use of tools (e.g., voice over text, group segmentation)
- Partnerships with local tech actors or NGOs

These case studies underscore that the future of cooperative communication in Nigeria is hybrid blending mobile technology, traditional media, and localized human facilitation for inclusive and sustainable engagement.

8. Recommendations for Strengthening ICT Adoption in Cooperatives

In light of the benefits and challenges identified, it is clear that a strategic and inclusive approach is needed to foster effective ICT adoption in Nigerian cooperative societies. These recommendations focus on capacity-building, infrastructure development, policy advocacy, and stakeholder collaboration to ensure sustainable digital integration and enhanced internal communication within the cooperative movement.

Launch Cooperative-Specific Digital Literacy Programs

To bridge the digital skills gap, it is critical to initiate targeted digital literacy training for both cooperative members and leaders. Such programs should cover the basics of mobile phone usage, social media management, email communication, online meeting platforms, and digital finance. Importantly, they must be tailored to different literacy levels and delivered in both English and local languages.



Training could be facilitated through partnerships between:

- State cooperative departments
- Local government authorities
- NGOs working on rural development and financial inclusion
- Technology firms offering corporate social responsibility (CSR) programs

Workshops should be hands-on, interactive, and community-based. Training younger members as digital champions can also promote peer-to-peer learning and long-term sustainability.

Improve Rural ICT Infrastructure

To address the infrastructural divide, the federal and state governments must invest in expanding rural broadband access, improving network coverage, and supporting off-grid energy solutions such as solar-powered digital centers. Public-private partnerships (PPPs) can play a vital role in reducing the cost of internet access and extending connectivity to underserved areas where most cooperatives operate.

Additionally, the Universal Service Provision Fund (USPF) under the Nigerian Communications Commission can be leveraged to establish ICT hubs or mobile learning kiosks where cooperative members can access digital tools and services at subsidized rates.

Provide Financial and Technical Support to Cooperatives

To overcome the cost barriers to ICT adoption, government agencies and cooperative federations should create grants, microloans, and digital toolkits to help cooperatives:

- Acquire smartphones, laptops, and projectors
- Subscribe to cooperative management software
- Develop mobile apps or SMS-based communication systems
- Train their executive and administrative staff

These supports should prioritize rural and low-income cooperatives to prevent digital exclusion. In addition, cooperatives should be encouraged to budget for ICT-related expenses and allocate a small percentage of their annual surplus for digital transformation initiatives.

Promote the Use of Simple, Localized ICT Tools

Not all cooperatives need sophisticated software platforms. Sometimes, low-cost and culturally appropriate tools are more effective and sustainable. Cooperatives should be encouraged to:

- Use WhatsApp or Telegram groups for meeting reminders and real-time discussions



- Adopt voice-based messaging systems for low-literacy members
- Use bulk SMS platforms with localized language options
- Explore cooperative software that allows offline use and local currency integration

Developers should be incentivized to create open-source, multilingual platforms tailored to the unique needs of Nigerian cooperatives especially those operating in agriculture, trade, and community finance.

Encourage Leadership Buy-In and Innovation Culture

Cooperative leaders play a decisive role in ICT adoption. Therefore, targeted leadership development programs should be organized to:

- Enhance their ICT awareness and capacity
- Inspire them to model digital behavior (e.g., holding virtual executive meetings, using email or apps for official communication)
- Equip them with change management skills to lead digital transition without alienating members

Furthermore, cooperatives should cultivate an innovation-friendly organizational culture that encourages experimentation, tolerates learning from mistakes, and recognizes digital success stories within the group.

Mainstream ICT in Cooperative Education and Policy

Digital communication and ICT tools should be mainstreamed into the national cooperative education curriculum. This includes:

- Updating the syllabi of cooperative colleges and training centers
- Producing manuals and guides on cooperative ICT usage
- Training extension officers and cooperative inspectors on digital facilitation methods

At the policy level, the Federal Department of Cooperatives should develop a National ICT Framework for Cooperatives in collaboration with stakeholders. This framework would:

- Set minimum digital communication standards
- Recommend platforms and tools suitable for different cooperative types
- Define roles for government, NGOs, and private sector actors
- Provide a roadmap for digital inclusion over a 5–10-year period

Foster Strategic Partnerships with ICT Stakeholders



Digital transformation in cooperatives cannot be achieved in isolation. Strategic partnerships with ICT companies, universities, tech hubs, and development agencies should be pursued to:

- Pilot cooperative-specific applications
- Create content and tools in indigenous languages
- Share innovations across states and regions
- Conduct monitoring and evaluation of ICT adoption impacts

For example, tech startups can develop mobile tools for cooperative accounting or inventory management, while universities can assist with research and training. Similarly, donor organizations can sponsor digital hubs in rural cooperatives as part of economic empowerment projects.

Create Feedback Loops and Monitoring Systems

To ensure accountability and continued relevance of ICT tools, cooperatives must establish feedback mechanisms that capture:

- Member satisfaction with digital platforms
- Barriers encountered during implementation
- Suggestions for improvement

These insights should be reviewed regularly during executive meetings and reported in annual cooperative reports. Furthermore, federations and apex bodies can develop ICT readiness assessment tools to periodically evaluate the digital maturity of member cooperatives and guide strategic support.

Conclusion

Strengthening ICT adoption in Nigerian cooperatives requires a comprehensive, inclusive, and multi-stakeholder approach. Digital transformation must go beyond acquiring devices or installing apps it demands investment in people, systems, and enabling environments. By prioritizing digital literacy, improving infrastructure, incentivizing leadership, simplifying tools, and embedding ICT in cooperative policies and education, cooperatives can unlock the full potential of digital communication. This will not only enhance internal engagement and transparency but also position Nigerian cooperatives as resilient, future-ready institutions in a rapidly digitizing world.

The integration of Information and Communication Technology (ICT) into the internal communication structures of Nigerian cooperative societies represents both a necessary evolution and a strategic imperative in today's digital economy. As demonstrated throughout this chapter, cooperatives long recognized for their role in grassroots economic empowerment stand to gain



significantly from embracing digital tools that enhance transparency, speed, engagement, and recordkeeping.

The chapter has established that ICT tools such as mobile phones, WhatsApp, email, cooperative management software, and mobile money platforms are being increasingly adopted, albeit unevenly. These tools serve not only as communication channels but also as facilitators of democratic participation, financial accountability, and operational efficiency. Cooperatives that leverage these tools can better mobilize members, disseminate critical information, manage resources transparently, and respond to both opportunities and crises in real time.

However, despite these benefits, the widespread adoption of ICT remains constrained by several challenges including limited digital literacy, poor infrastructure, high costs, cultural resistance, and lack of institutional support. These barriers are more pronounced in rural and informal cooperatives, where the digital divide threatens to widen existing inequalities and limit access to modern tools that could otherwise uplift their operations.

To address these gaps, the chapter has proposed practical recommendations, such as launching cooperative-specific digital literacy programs, improving rural ICT infrastructure, subsidizing digital access, encouraging leadership buy-in, simplifying tools, and developing a national cooperative ICT policy framework. Strategic partnerships with ICT stakeholders and the embedding of ICT in cooperative education and governance structures were also emphasized as vital pathways for sustainable transformation.

Ultimately, for Nigerian cooperatives to remain relevant, resilient, and responsive to member needs, they must embrace the digital future with intentionality and inclusiveness. ICT adoption should not be viewed as a luxury or optional upgrade but as a foundational component of modern cooperative governance. As global trends shift toward e-cooperatives, virtual communities, and digitally enabled value chains, Nigerian cooperatives have an urgent opportunity to innovate, adapt, and lead in ways that are both locally rooted and globally connected.

The road ahead requires investment, collaboration, and a reimagining of how communication, trust, and participation are cultivated in the digital age. With the right policies, tools, and mindset, cooperative societies in Nigeria can successfully harness ICT not only to improve internal communication but also to strengthen their collective impact on national development and social transformation.

References

- Chambo, S. A. (2009). *Agricultural cooperatives: Role in food security and rural development*. International Cooperative Alliance.
- UNESCO. (2019). *ICT in education*. <https://en.unesco.org/themes/ict-education>
- Cornelissen, J. (2020). *Corporate communication: A guide to theory and practice* (6th ed.). SAGE Publications.



- Davis, F. D. (1989). *Perceived usefulness, perceived ease of use, and user acceptance of information technology*. MIS Quarterly, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Federal Ministry of Communications and Digital Economy. (2020). *National Digital Economy Policy and Strategy (NDEPS) 2020–2030*. <https://www.nitda.gov.ng>
- GSMA. (2022). *The mobile economy Sub-Saharan Africa 2022*. <https://www.gsma.com/mobileeconomy/sub-saharan-africa/>
- International Cooperative Alliance (ICA). (2021). *What is a cooperative?* <https://www.ica.coop/en/cooperatives/what-is-a-cooperative>
- Laudon, K. C., & Laudon, J. P. (2020). *Management information systems: Managing the digital firm* (16th ed.). Pearson.
- Mazzei, A. (2014). *Internal communication for employee enablement: Strategies in Italian companies*. Corporate Communications: An International Journal, 19(1), 82–95. <https://doi.org/10.1108/CCIJ-08-2012-0060>
- Nigerian Communications Commission (NCC). (2023). *Industry statistics: Subscriber data*. <https://www.ncc.gov.ng/statistics-reports/industry-overview>
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- UNESCO. (2019). *Digital literacy: A toolkit for policy makers*. <https://unesdoc.unesco.org/ark:/48223/pf0000370934>
- UNESCO. (2019). *ICT in education*. <https://en.unesco.org/themes/ict-education>
- UNESCO. (2019). *Information and communication technology (ICT) in education*. <https://en.unesco.org/themes/ict-education>
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- World Bank. (2021). *Nigeria digital economy diagnostic report*. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail>