



World  
Council  
of Credit  
Unions

## Technical Guide

# Using Mobile Technology to Expand Financial Inclusion

*The Credit Union Experience*



This technical guide provides an overview of World Council of Credit Unions' experience increasing access to savings and other financial services through credit unions using mobile technologies such as smartphones, POS devices and cellphones.

## **What is a Credit Union?**

Credit unions are member-owned, savings-led financial cooperatives. They provide an array of financial service products, including savings, credit, insurance and remittances, to meet the evolving needs of people from all socioeconomic levels.

Credit unions worldwide provide members opportunities such as starting small businesses, growing farms, building family homes and educating their children. In some countries, members encounter their first taste of democratic decision making through their credit unions.

## **What is World Council of Credit Unions?**

World Council of Credit Unions (WOCCU) is the global trade association and development agency for credit unions. World Council promotes the sustainable development of credit unions and other financial cooperatives around the world to empower people through access to high-quality and affordable financial services. Worldwide, 53,000 credit unions provide services to more than 188 million credit union members in 100 countries. They have mobilized US\$1.2 trillion in savings and shares to finance a loan portfolio of US\$960 billion.

World Council introduces new tools and technologies to strengthen credit unions' financial performance, governance, outreach, product quality and product diversity. It also advocates on behalf of the global credit union system before international organizations and works with national governments to improve legislation, regulation and supervision.

Learn more about World Council's impact around the world at [www.woccu.org](http://www.woccu.org).

# Savings-led Approach to Mobile Technology

The increasing popularity of transaction and payment services through cellphones and mom-and-pop shops has revealed the tremendous potential to expand financial inclusion through mobile technology. These “electronic money” models have already improved the lives of millions by reducing the need to carry cash or spend time travelling over long distances to reach the nearest point of service. Nonetheless, successful models linking electronic money to interest-bearing savings, loans and other financial services have been limited. Worldwide, 2.5 billion people still lack access to these basic financial products.

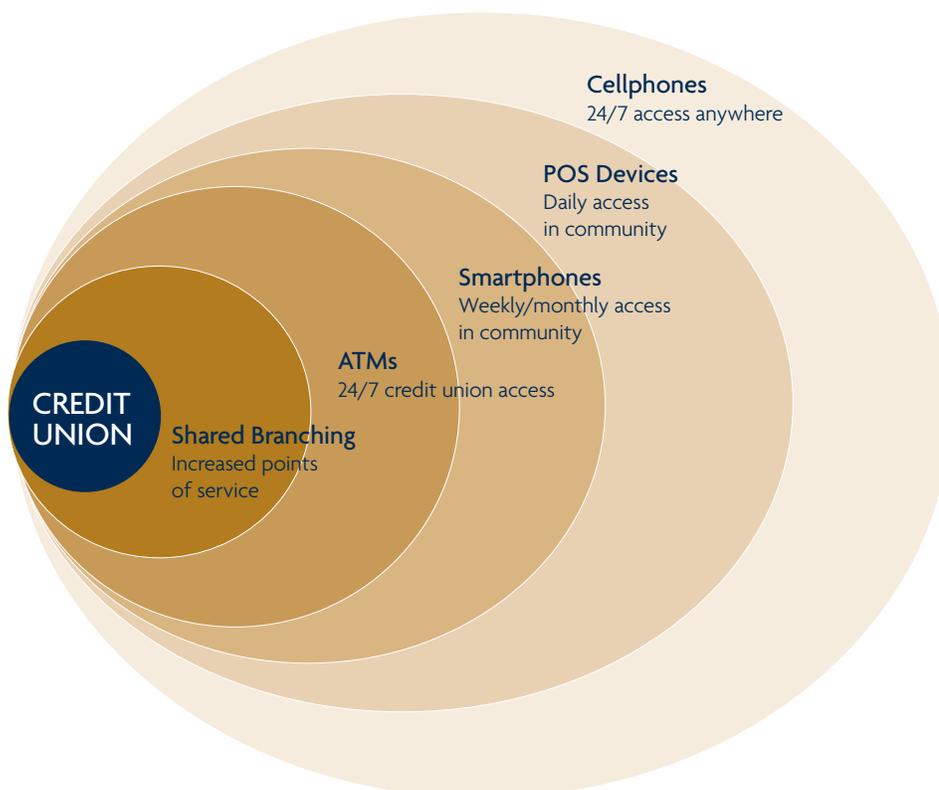
For four decades, World Council of Credit Unions has used a savings-led model to bring financial services to the rural and underserved poor. Traditionally, this meant setting up a credit union or branch office and drawing people in from the community. In many areas, however, population density did not support a new credit union branch office,

and travel costs discouraged unbanked residents from opening and maintaining an account. Today, World Council works with credit unions to implement cost-effective mobile technology solutions that give the world’s poor access to financial products as well as transaction and payment services in the communities where they live and work.

World Council’s approach focuses on building national, regional and international credit union networks and capitalizing on existing ones. By pooling interests and negotiating as a collective group, credit unions that otherwise may not be able to afford mobile technology gain access at a lower cost, and their members benefit from additional products, points of service and lower fees. Each mobile solution is designed to expand the credit unions’ reach and provide increasing levels of financial access to the unbanked and underserved.

## Increasing Levels of Access and Convenience

*Through World Council’s mobile technology strategy, credit unions leverage the collective size and bargaining power of a network to serve more members, more effectively, more often.*



In some countries, credit union field officers travel to rural and remote communities on a scheduled weekly or monthly basis to provide services. The field officers use credit union-linked **smartphones** to enroll members and conduct financial transactions, such as balance inquiries, deposits and withdrawals, in real time.

In these and other communities, credit unions have arranged with local member-merchants to install **point-of-sale (POS) devices** in their shops, joining an agent network that provides both payment and financial services. Members only need to swipe a debit card to access their credit union account at the local business. By leveraging the merchants' existing infrastructure, the credit union expands the hours of financial access from one or two

hours weekly (or monthly) to the merchants' daily business hours.

Personal **cellphones** can connect members to their credit union's network to make or receive payments and access their accounts 24 hours a day, seven days a week. When a credit union network connects with larger payment or financial networks, members gain even more access points and services outside the credit union system.

This guide highlights how each device fits into World Council's overall strategy for increasing financial inclusion, touching on specific credit union experience in different countries and contexts.

## Foundation: Credit Union Networks

Few credit unions in developing countries have the capacity and resources to establish and manage a network on their own that can offer mobile financial and payment services. World Council engages with these credit unions through their locally run national or regional associations, many of which are members of World Council's international trade group. It then provides the technical expertise to jointly create a formal business network through WOCCU Services Group (see box).

The network sets internal policies and standards for participating credit unions and facilitates its integration

with other payment, transaction or financial networks. It continually monitors and secures data channels and performs due diligence on potential service providers and credit unions to minimize potential risk and ensure regulatory compliance. As network shareholders, credit unions negotiate their collective interests to bring better services to their members and reach the unbanked. World Council has helped establish such networks in Bolivia, Colombia, Ecuador, Kenya, Mexico and Peru.

Many credit union networks initially stemmed from the need to centrally process and deliver international

### WOCCU Services Group

WOCCU Services Group (WSG) invests in the development and implementation of credit union products and services offered through local service organizations that are jointly owned by individual credit unions, their associations and WSG. Under the "Entura" brand, credit unions are able to offer members shared branching, domestic and international remittances and mobile banking services as well as additional access points through automatic teller machines (ATMs), point-of-sale (POS) devices, cellphones and smartphones used by credit union field officers during member visits.

WSG pools credit union interests and negotiates on behalf of the international network to secure competitive rates. Credit unions that otherwise may not be able to afford such products and services gain market access through Entura, and credit union members benefit from additional services at market price.

WSG has established local offices in Bolivia, Colombia, Ecuador, Kenya, Mexico, Peru and the United States. Contact [info@enturaglobalnet.com](mailto:info@enturaglobalnet.com) for business opportunities through WSG.



**remittances** in the rural communities they served. Credit unions continue to use their network hubs to receive and distribute money transfers at a consolidated and much more affordable cost. The networks can also facilitate **shared branching**, which allows members who live in one town and sell their goods in another to access and manage their accounts at any other affiliated credit union's branch office. The addition of **automated teller machines (ATMs)**

gives members access to their accounts outside a branch office or at a retail location without having to wait in line to see a teller.

Today, increasingly more credit unions are using **smartphones, POS devices** and **cellphones** to further expand financial, transaction and payment services through these same networks.

## ECUADOR

*Credit union networks offer lower fees*

From the urban capital to the rural Amazon region, credit unions in Ecuador serve a wide range of communities and boast a 25% penetration rate among the country's economically active population. Given their breadth and depth of outreach, the credit unions have explored mobile solutions to further expand financial inclusion and member access at a cost both the institutions and those they serve can afford.

Some larger credit unions initially formed small, regional networks to offer their members greater convenience in a competitive market. Nonetheless, competition was intense, entry costs were high, and the credit unions were limited to developing services à la carte through various networks. Minimum transaction requirements made it even more difficult for small, rural credit unions to offer such services, but they did not have the infrastructure or personnel to establish a network on their own.

World Council brought together competing credit unions to create their own national network in 2004.<sup>1</sup> Twelve credit unions with 92 branch offices and 626,566 members launched the network, currently known as Coonecta, which provided a central point of access to various mobile financial services. As a single entity, the network negotiates with service providers and other networks to secure lower costs and higher commissions for the collective group, which passes the cost savings to those they serve. Access to financial, transaction and payment services are accordingly more affordable for the low-income and unbanked.

The Coonecta network has grown to 70 credit unions with 513 branch offices that serve 2.3 million members. Credit unions that range in size from 860 to 320,000 members offer transaction and payment services, shared branching, government payments, debit cards and ATM services across the national network. Coonecta is also linked to World Council's International Remittance Network (IRnet®), which negotiates competitive sender fees (generally 3-4% of the amount transferred) and higher commissions for remittances that originate or are distributed through credit unions. Some credit unions on the network have begun using smartphones, POS devices and mobile banking through cellphones to expand financial inclusion and further lower the cost of reaching the unbanked.



<sup>1</sup> World Council's USAID-funded program (2002–08) focused on financially strengthening credit unions, forming a national credit union network, expanding international remittance distribution and establishing rural telecenters. The Colorado Credit Union League, Credit Union Service Corporation, Louisiana Credit Union League and the New York Credit Union League contributed to the overall network design through their affiliations with World Council.

## Smartphones | FIELD OFFICER MODEL

### *Introducing financial services to the rural poor*

*In the **field officer model**, designated credit union staff regularly travel to rural communities to provide the credit union's services in an informal group setting. Field officers use personal digital assistants (PDAs) or smartphones, such as the iPhone, to remotely create or access member accounts.*

In many rural areas, population density is too low to support a branch office, and the time and travel costs to reach a credit union are too prohibitive for the poor and unbanked. In order to expand financial access beyond the credit union walls, World Council developed the field officer model in which rural credit union staff take financial services directly to homes and businesses in remote, underserved communities. The addition of smartphone technology has improved the efficiency of financial transactions and reduced operational costs, providing more frequent opportunities to open and access member accounts in real time during field officer visits.

In the field officer model, credit union employees visit rural communities on a weekly or monthly schedule to enroll new members, collect deposits, perform withdrawals, process small loan applications, disburse microloans and receive loan payments. Credit unions select communities using a route-costing tool developed by World Council that identifies profitable markets. Oftentimes, if at all, these markets have only had access to high-interest loans or informal community savings groups.

When World Council first launched the model, field officers recorded transactions by hand and reentered them into the credit union database at the end of their daily circuit. Field officers now use a tailored smartphone software application that wirelessly connects to the credit union server to process transactions and provide members real-time access to their accounts. In areas with little or no cellphone connectivity, the smartphone encrypts and stores transaction data offline and later synchronizes it with the credit union's system using batch processing. In the field, handheld wireless printers provide members with receipts that have up-to-date account balances after each transaction. Printed receipts increase transparency and customer satisfaction while reducing the potential for fraud.

The use of smartphones not only increases the efficiency and accuracy of field officers, but also improves the credit union's overall image and ability to attract more members. Credit unions have found that previously unbanked individuals are more trusting of the credit unions. Many have subsequently joined, moved their money into savings accounts, taken out progressively larger loans and accessed additional financial products to help manage their evolving financial needs.

### Credit Union Network Role

Through its collective bargaining power and centralized services, a credit union network significantly reduces the operational costs of implementing smartphones. The network negotiates reduced rates for back-office hardware, smartphones and data plans. It then develops or purchases the software application for the smartphone and integrates it into the credit unions' core banking systems. Credit unions pay the network a monthly software licensing fee that covers ongoing technical support, maintenance and software updates.

### Regulatory Compliance

When performing transactions in the field, credit unions comply with the same regulations and policies they use for operations within a branch office. This typically involves verifying the customer's identity according to know-your-customer (KYC) regulations and monitoring and reporting suspicious activity based on local interpretation of international standards. Credit unions file reports for large cash transactions according to anti-money laundering (AML) and combating the financing of terrorism (CFT) regulations.

### Security

Since field officers risk robbery and loss of member deposits by carrying large sums of cash, credit unions limit how much money they can carry between the credit union and the community. They also plan daily routes that permit deposits to be "recycled" as withdrawals or loans in nearby communities. Information stored on smartphones is password-protected, and credit unions can remotely deactivate data plans or delete member and financial

information in cases of theft. Credit unions are working to develop and connect to agent banking networks so that field officers can deposit or withdraw money through a nearby merchant's POS device rather than carry excess cash to the credit union.

Smartphones give credit unions the means to more efficiently deliver financial services deep into rural

communities. However, access for members is limited to weekly or monthly visits that at times can be delayed or canceled due to weather or other extenuating circumstances. POS devices give members daily access through merchants within their community.

## MEXICO & UNITED STATES

### *Taking financial services to the field*

In Mexico, World Council introduced smartphone technology at two rural credit unions in 2008 to improve service delivery through a field officer model called *Semilla Cooperativa* [cooperative seed]. Today, five credit unions with 239,000 total members are employing smartphones using the *Semilla Cooperativa* model. They report that the average transaction time has reduced from four-and-a-half minutes to three minutes because field officers no longer have to re-enter data in the credit union system at the end of the day, which allows them to serve more people on their daily routes. A new GPS application for the smartphone is under development and will allow credit unions to track the field officers' locations from the branch office to provide extra security and monitor efficiency.

In total, 54 credit unions with 235 points of service in 22 Mexican states implemented *Semilla Cooperativa* through World Council's rural credit union outreach program, funded by the Mexican government. In addition to employing smartphones, the credit unions installed POS devices at local member businesses and ATMs at rural branches to further expand remote access to payment, transaction and financial services. The program helped open 22 additional branch offices and brought financial services to more than 250,000 marginalized people in three years, 9% of whom came from indigenous populations. Credit union outreach far surpassed the program's target 15% market penetration. World Council is now replicating the model in Colombia.



In 2010, World Council transferred the smartphone technology to a credit union in **California (USA)** that uses iPhones to deliver financial services to agricultural workers in the field. Building on the California credit union's existing relationship with the community, a field officer travels weekly to the local farm to open accounts, deposit checks and process withdrawals through an iPhone application specifically designed for the credit union. The new service not only saves agricultural workers time, but it provides a much more affordable alternative to the check cashers and payday lenders who park outside their workplace on payday.

# OVERVIEW:

# Mobile Technologies for Remote Service Delivery

	SERVICES	BENEFITS	FEE CONSIDERATIONS
<b>Shared Branching</b>	Ability to access and manage credit union accounts at other networked credit unions and their mobile devices throughout the country or internationally.	Convenience and cost-savings for members, who can deposit and withdraw cash at more locations.  Increased security for members who can now deposit and withdraw their money in the same town where they sell their goods rather than carry it a long distance home.	No member fees.  The credit union that performs the transaction receives a fee from the member's credit union, which absorbs the cost on the member's behalf.
<b>ATMs</b>	Provide members 24/7 access to credit union accounts at the branch office or other locations. Potential services include: <ul style="list-style-type: none"> <li>• account balance inquiries</li> <li>• account transfers</li> <li>• deposits</li> <li>• loan payments</li> <li>• withdrawals</li> </ul>	24/7 access for members.  Members no longer have to wait in line to receive service.  Fees generate credit union revenue.  Less staff time spent on processing transactions.	Member fees based on ATM maintenance and transaction costs.  Fee distribution varies by business model and operating environment, taking into account each entity's role and level of responsibility, money invested and assumed risk.
<b>Smartphones</b> <i>Field Officer Model</i>	Provide financial services in the field, including those requiring large amounts of data entry. Credit union field officers may use smartphones to process: <ul style="list-style-type: none"> <li>• deposits</li> <li>• loan applications</li> <li>• loan information</li> <li>• loan payments</li> <li>• new member sign-up</li> <li>• withdrawals</li> </ul>	Convenience and cost-savings for members with access at their homes and businesses.  Real-time account access and receipts increase efficiency, accuracy and transparency of the model while reducing the potential for fraud.  Faster loan application process.  Personalized service builds trust in financial system and improves credit union image.	No member fees.  The credit union pays the network a monthly software licensing fee per smartphone.
<b>POS Devices</b> <i>Agent Banking</i>	POS devices placed at branch offices or third-party agents allow members to perform real-time transactions that require small amounts of data. Potential services for members include: <ul style="list-style-type: none"> <li>• account balance inquiries</li> <li>• deposits</li> <li>• loan payments</li> <li>• retail purchases</li> <li>• withdrawals</li> </ul> Potential services for both members and nonmembers include: <ul style="list-style-type: none"> <li>• bill payment</li> <li>• cellphone airtime purchase</li> <li>• person-to-person/business transfers</li> <li>• government payment collection</li> <li>• remittances</li> </ul>	Members have daily, real-time access to their accounts through local merchants.  Credit unions increase points of service, reach new markets, build relationships with nonmembers and generate fee income from transactions.  Merchants increase store traffic and revenue from transaction fees.  Credit union field officers can use the POS devices as cash drop-off or pick-up points during community visits.  Ability to connect to other banking networks.  Receipts increase transparency for both the agent and customer and reduce the potential for fraud.	Member fees based on network maintenance and transaction costs as well as any licensing or registration fees.  Fees are divided among the credit union, agent and other technology providers. Fee distribution varies by business model and operating environment, taking into account each entity's role and level of responsibility, money invested and assumed risk.
<b>Cellphones</b> <i>Mobile Banking</i>	Provide members access to their accounts as well as payment and transaction services through their cellphone, which may include: <ul style="list-style-type: none"> <li>• account balance inquiries</li> <li>• deposits</li> <li>• payments and/or person-to-person/business transfers using stored value (non-interest bearing) or credit union (interest-bearing) accounts</li> <li>• government or humanitarian payment collection</li> <li>• remittances</li> <li>• withdrawals</li> </ul>	24/7 access through a personal cellphone.  Cellphone prevalence enables rapid expansion of financial services.	Member fees based on network maintenance and transaction costs as well as any licensing or registration fees.  Fees are divided among the credit union, third-party entities and other technology providers. Fee distribution varies by business model and operating environment, taking into account each entity's role and level of responsibility, money invested and assumed risk.

The credit union experience in mobile technology has focused primarily on five delivery channels: shared branching, ATMs, smartphones, agent banking through POS devices and mobile banking through cellphones. A strong network and core banking system are essential underpinnings for a credit union's successful mobile outreach strategy. Understanding regulatory requirements for both electronic

banking and financial services is critical, as well as evaluating and selecting potential market partners. World Council works with credit unions and networks to identify the appropriate mobile solutions and when to introduce them based on the regulatory environment, market, data communications infrastructure and the unique needs and challenges of the credit unions and their members.

PREREQUISITES		POTENTIAL ROADBLOCKS
Technology	Compliance	
<p>Central switch that connects the core banking systems of credit unions and their branch offices and has the capacity to process the expected transaction volume.</p> <p>Reliable data connection through a dedicated line, satellite or radio communications.</p>	<p>Adhere to policies and standards required to join a credit union network.</p>	<p>Lack of agreement on standard policies and procedures among network members.</p>
<p>Central switch that connects the ATMs to the core banking systems of credit unions, their branch offices and/or third-party networks and has the capacity to process the expected transaction volume.</p> <p>A dedicated line between ATMs and the credit union.</p> <p>Third-party entity, such as a credit union network, to install and support an ATM network.</p> <p>ATM machines (refurbished or new).</p> <p>Credit union-issued debit cards and PINs.</p>	<p>Adhere to policies and standards required to join a credit union and/or third-party network.</p> <p>Regulatory approval for credit unions to own and operate ATMs.</p>	<p>High upfront costs.</p> <p>Security to prevent theft of ATMs and funds.</p> <p>User education on ATM operation and the importance of keeping PINs private.</p>
<p>Central switch that connects the smartphones to the core banking systems of the credit union branch offices.</p> <p>Reliable cellphone network and data plan.</p> <p>Licensed smartphone software application that is preconfigured to interface with the switch.</p> <p>Adaptations to the core banking system necessary to integrate with the smartphone technology.</p> <p>Reliable data encryption systems to protect member information transferred over the cellphone network.</p> <p>Smartphone devices and handheld printers.</p>	<p>Regulatory compliance with signing up new members, specifically regarding KYC requirements, and performing transactions outside the branch office.</p>	<p>Costs and time associated with potentially hiring additional credit union staff and providing field officer and smartphone training.</p> <p>Security risks associated with field officers carrying cash.</p>
<p>Central switch that connects the POS devices to the core banking systems of credit unions, their branch offices, third-party agents and/or third-party networks and has the capacity to process the expected transaction volume.</p> <p>Reliable data connection.</p> <p>POS devices with card reader and current data encryption standards and printers to issue receipts.</p> <p>Licensed software application for the POS device that is preconfigured to interface with the switch.</p> <p>Credit union-issued debit cards and PINs.</p>	<p>Legal right to provide financial services through a third party. Credit unions are still responsible for any AML/CFT violations.</p> <p>Procedures in place to comply with AML/CFT requirements, including account size thresholds, functionality and transaction volumes.</p> <p>Consideration of licensing and registration requirements, reporting requirements and consumer protection rules.</p>	<p>Regulations may prohibit third-party agents from offering financial products and services.</p> <p>Agent training logistics and expenses; compliance with AML/CFT requirements.</p> <p>Agents' limited liquidity may impede cash-out services for members. At the same time, increased liquidity levels from deposits and transactions may put them at risk for theft.</p> <p>Lack of user/member trust in the agent, credit union or technology.</p> <p>Unsuccessful conversion of repeat payment/transaction users to credit union members.</p>
<p>Central switch that connects the cellphones to the core banking systems of credit unions, their branch offices, third-party entities and/or third-party networks and has the capacity to process the expected transaction volume.</p> <p>Reliable cellphone network for target market.</p> <p>Well-developed agent network to provide cash-in and cash-out services.</p> <p>Data security system that includes user authentication, device authentication and SMS alerts each time a successful login occurs.</p>	<p>Prudential classification of credit unions and electronic banking regulations that allow credit unions to provide specific products and services through the cellphone.</p> <p>Consideration of licensing and registration requirements, reporting requirements and consumer protection rules.</p> <p>Minimum capitalization as required for mobile banking.</p> <p>Adhering to AML/CFT thresholds on liquidity, stored value account balances and transactions specific to mobile banking.</p> <p>Adhering to KYC requirements for customer identification in absence of a credit union or third-party agent.</p>	<p>Regulations may prohibit credit unions from offering financial products and services through cellphones.</p> <p>High upfront costs.</p> <p>Lack of demand among credit unions and/or the target market.</p> <p>Compliance with AML/CFT requirements.</p> <p>User education on cellphone operation for mobile banking.</p>

## Point-of-sale Devices | AGENT BANKING

### *Integrating payment services and increasing financial access*

**Agent banking includes the use of POS devices at local merchants that give members debit card access to their credit union accounts. Both members and nonmembers can use POS devices for transaction and payment services.**

As people entrust more of their savings and resources to the formal financial system, they require more frequent access in their communities beyond weekly or monthly field officer visits. Some credit unions have installed POS devices in local mom-and-pop shops, gas stations, agricultural input providers and restaurants to increase the points of service and hours in which members can access their accounts and other transaction and payment services.

Credit unions form this agent network with well positioned and respected local merchants who have sufficient liquidity, foot traffic and security to provide services through the POS devices. The merchants are or become credit union members and take on the local “face” of the credit union. This approach gives credit unions the opportunity to deliver financial services much deeper into underserved areas, often beyond the reach of traditional agents through retail chain networks.

Credit union members use a debit card and personal identification number (PIN) to make cash deposits, loan payments, withdrawals and store purchases from their accounts through the POS devices. When a member makes a deposit or loan payment, the credit union debits the amount from the agent’s credit union account and credits the individual member’s account. For withdrawals, agents provide the member with cash and receive an equivalent credit in their account offset by a debit to the member’s account. In some cases, credit unions establish lines of credit for agents that lack sufficient liquidity to perform customer transactions. POS device-issued receipts provide a transparent record of the transaction for both the agent and the customer and reduce the potential for fraud.

In addition to expanding financial access, agent banking provides an avenue for credit unions to offer popular transaction and payment services, such as making person-to-person transfers, paying utility bills, purchasing

cellphone airtime and collecting government payments. By extending these services through trusted merchants within the community, credit unions build relationships with the unbanked and are able to introduce them to financial products through the POS devices.

### Credit Union Network Role

A credit union network eliminates the redundant costs each credit union would incur if it were to build a separate infrastructure for agent banking. The network identifies and contracts with POS hardware and software providers as well as third parties, such as utility or cellphone companies. Then it works with the software provider to make the necessary data connections to all parties involved. The network can instantly add new services and vendors to all of the POS devices with one central update using the POS management software.

The network processes POS transactions daily and typically serves as the settlement agent among the credit unions, their agents and other third parties. As settlement agent, the network monitors the cash levels of credit union settlement accounts, airtime credit balances of individual agents and agent transaction history. It also provides ongoing support through a call center. In countries where credit unions lack access to payment systems, institutions typically identify a third-party bank through which they can open an account to settle funds.

The network equips and trains credit unions on the POS devices, and the credit unions then provide training to their contracted agents. Since agents take on additional cash risk, the network sometimes applies a “cycle limit” to each agent. Once agents reach this threshold, they can no longer accept member deposits until they deposit the excess cash in the credit union.

### Regulatory Compliance

Agent banking requires legislation that allows credit unions to use third-party agents to handle cash deposits and withdrawals. Local laws, standards and banking regulations related to AML/CFT and KYC, data security, electronic fund transfers, consumer protection and licensing and registration

requirements also apply to credit unions that employ agent banking. POS software applications are designed to limit transaction volumes and frequency as one way to facilitate agent compliance. Credit unions are ultimately responsible for any regulatory violations their agents incur.

In addition to providing more convenient and frequent access to savings, loan, transaction and payment services, the POS devices and agent network lay the groundwork for the cash-in, cash-out services required to launch a successful mobile banking platform through cellphones.

## BRAZIL & GUATEMALA

*Increasing points of service through agent networks*

**S**ICREDI, a system of 124 **Brazilian** credit unions serving 1.7 million members, began developing an agent banking network in 2007 as a part of its strategy to expand access through alternative distribution channels. In the first year after initial implementation, the number of agent transactions increased by 25% compared to a 5% increase in the branch offices. SICREDI found it was nine times less expensive to carry out a transaction through an agent than a teller.

Today, the agent banking model continues to rise in popularity, especially in small communities where credit unions have 60% of the market share. More than 2,200 agents in 700 communities are now processing an average of 1.3 million payment and credit union transactions per month. An additional 40,000 POS devices located in retail shops allow credit union members to pay for products or services using their SICREDI debit or credit card. Members may also access their accounts through SICREDI's network of more than 2,000 ATMs and its partner networks in Brazil's larger cities.



**I**n 2010, 22 **Guatemalan** credit unions built on their branded "MICOOPE" ATM network to connect with POS devices at 300 local credit union agents, including gas stations, convenience stores and restaurants. Members use their debit cards to make deposits, withdraw cash and pay for purchases directly from their credit union accounts. Credit unions do not charge merchant or member fees for debit card purchases, and agents receive a commission per member deposit and withdrawal. Credit unions recoup their costs with 10 total transactions per week, per machine, and estimate the POS devices save them 37% in staff time costs.



Agents performed 7,000 transactions through the devices in October 2011, a 530% increase from the previous year. Deposits, though fewer than transactions and withdrawals, accounted for a growing 15% of the total number of transactions. As transaction volume and member demand grow, credit unions plan to explore additional transaction services through the POS devices, including bill payment and remittance distribution.

## Cellphones | MOBILE BANKING

*Putting financial access into people's hands*

**Mobile banking allows credit union members to remotely access financial services through their cellphone, including the ability to make interest-bearing cash deposits and withdrawals through a third party.**

Agent banking gives people access to transaction, payment and financial services during local business hours, but mobile banking can give them access at any time of the day through a cellphone. With 1 billion people worldwide who have a cellphone but lack a simple bank account, mobile banking also offers an attractive means to achieve financial inclusion.

Mobile network operators (MNOs) have given many cellphone users the option to perform transaction or payment services by using the value of their airtime to transfer money and pay bills or insurance premiums. People in some countries are also able to use airtime value to make cash deposits and withdrawals (cash in and cash out) through a network of agents and, in some cases, receive salary, government and humanitarian payments through their cellphone. Although MNOs are authorized to provide transaction or payment services in some countries, they are not permitted to offer their users access to interest-bearing savings accounts without a financial institution link and supporting regulations in place.

Credit unions are savings-led institutions that offer a host of financial products tailored to their communities' needs, but as standalone institutions they often lack the human, financial and technological resources to link their members' accounts to a mobile banking platform. Consequently, MNOs have typically viewed credit unions as sources of liquidity to sell airtime and provide cash-in and cash-out services rather than as potential financial service partners. When credit unions pool their resources as a network, however, they are able to lower the overall cost of mobile banking. The credit union network covers a wider area than single institutions alone and provides deeper outreach than larger financial institutions that have the means to offer mobile banking on their own.

The points of service, depth of outreach and resources credit unions collectively present as a network also offer

a viable business opportunity for larger MNO platforms. Through a MNO-credit union link, credit union members can connect their savings accounts to a host of transaction services, while existing cellphone users have the opportunity to join the credit union and access interest-bearing accounts through their cellphones.

Member accounts reside with the credit union, which is connected to the MNO's communications network. This allows members to access their savings wherever they have cellphone access rather than build a non-interest-bearing airtime account to perform mobile transactions. If regulations permit, the MNO's agents — for example, mom-and-pop shops, retail stores or gas stations — can also accept member account deposits and withdrawals.

A financial institution does not need a MNO partnership to develop a smartphone mobile banking application for cellphone users. However, credit unions that aim to reach a poorer population segment, which typically does not use phones with data plans, must develop a closed network of their own or work with a MNO to install mobile banking software onto cellphone SIM cards. A mobile banking platform that operates through a SIM card offers the highest level of security for users.

### Credit Union Network Role

The credit union network is able to negotiate lower transaction fees for their members than a single institution with less expansive outreach. All entities involved in mobile banking — the MNO, credit union, third-party providers and regulators — have clearly defined roles and responsibilities in order to provide a seamless and worthwhile service to members. MNOs run some of the largest national retail distribution networks and have experience with high-volume, low-value transactions and marketing to this segment, but only a financial institution is allowed to offer interest-bearing accounts. As part of the MNO network, credit unions can also provide third-party agents greater access to liquidity for cash-out services.

### Regulatory Compliance

The credit union network first determines which laws

govern mobile banking in the country and whether credit unions are allowed to provide mobile banking services. Based on the country's prudential classification for credit unions and its electronic banking regulations, the network determines which products and services they can offer through the cellphone. Credit unions then acquire a license or registration to offer such services.

Once a credit union-MNO alliance is established, cellphone users can access integrated transaction, payment and financial services from the palms of their hands wherever and whenever they have a cellphone connection. Members of the networked credit unions gain even more access points and services outside the credit union system as the mobile banking platform connects to larger payment or financial networks.

## HAITI, MEXICO & KENYA

*Expanding mobile banking platforms through credit unions*

In Haiti, World Council is managing the Haiti Mobile Money Initiative (HMMI), a program financed by the U.S. Agency for International Development (USAID) and the Bill & Melinda Gates Foundation and implemented through World Council's USAID-funded Haiti Integrated Financing for Value Chains and Enterprises (HIFIVE) program. HMMI provides incentives to encourage MNOs and other stakeholders to rapidly develop and launch mobile money services in Haiti. Launched in June 2010, an immediate goal was to aid reconstruction efforts and facilitate the delivery of aid to earthquake victims. By January 2012, six nongovernmental organizations in Haiti were delivering humanitarian payments to earthquake victims using mobile money. Product diversity through cellphone technology has grown rapidly, and the number of agents providing mobile money services has more than doubled. The longer-term vision includes expanding and deepening financial inclusion through these services, which will provide low-cost, secure and easy-to-access payments and other financial services for Haiti's unbanked poor. With more than 700,000 registered mobile money users, ongoing product and service development and a rapidly expanding agent network, mobile banking in Haiti has had a very promising start.



In Mexico, regulators do not currently allow MNOs to provide cash-in and cash-out services of airtime minutes. Mobile banking transfers must be performed between financial institutions through the central bank's national clearing and settlement system. Four major banks are currently offering mobile banking in Mexico through the Telcel network. The credit union network there will partner with the Telcel network in 2012. The partnership will allow users to remotely connect to their credit union accounts using a platform that operates through the cellphone's SIM card.



In Kenya, where Safaricom's M-PESA has dominated the mobile money landscape in recent years, World Council has developed a network that can connect credit unions of varying sizes and membership to the Safaricom platform. This enables credit union members not only to use M-PESA's standard services, but to integrate their regular credit union accounts with the mobile interface. Users can check account balances, access their direct deposit salary and repay loans using M-PESA — all for a lower rate than similar services offered by major banks in Kenya. Through its partnership with Safaricom, which offers money transfers through Western Union, the credit union network can provide members lower-cost remittances through their own alliances with money transfer operators. It also offers the M-PESA connection at no additional charge. World Council's mobile interface, which links a member's credit union account and M-PESA account, is currently in the pilot stage.

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# Mobilizing a New Savings-driven Customer Service Model

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For decades, credit unions have reached out to rural and underserved areas by building new branch offices or forming village groups that regularly meet with credit union field officers. Today, credit unions are evolving with the changing landscape of their environment. They are expanding their reach through alternative mobile technology-driven distribution channels that give members more frequent and convenient access to their accounts.

At their core, credit unions are savings-based financial cooperatives. The mobile service delivery evolution is their opportunity to help people link electronic cash flows to interest-bearing savings and other financial services. When products such as remittances and conditional cash transfers (CCTs) are distributed through a credit union that uses mobile technology, recipients have more convenient options for pick-up — a branch office,

smartphone-equipped field officer, local merchant's POS device or their own cellphone.<sup>2</sup> Recipients can instantly convert the money into a variety of savings mechanisms offered through the credit union, such as a savings account, prepaid debit card or mobile money through the cellphone — something they cannot do through a money transfer or payment agent alone.

As the environment continues to change, the delivery of financial services will continue to evolve. With a proven savings mobilization strategy at the core of each credit union network, credit unions have the tools to further expand rural outreach through mobile technology, and World Council will continue to provide the development and regulatory guidance to help make financial inclusion a reality.

<sup>2</sup> Conditional cash transfers (CCTs) are welfare payments conditional upon certain recipient behavior, generally related to education, health or nutrition.

# International Regulatory Standards and Mobile Money Platforms

## Anti-Money Laundering, Combating the Financing of Terrorism and Know Your Customer

National regulatory agencies interpret and apply Financial Action Task Force (FATF) guidelines in a wide variety of ways, especially considering credit unions may be regulated as financial institutions, non-bank financial institutions, neither or both. World Council works with international bodies and national credit union regulators to ensure AML/CFT controls are not so strict that they impede innovation or exclude low-income, rural and undocumented individuals from formal financial or payment services.<sup>3</sup>

Based on credit union experience and FATF recommendations, the following regulatory considerations apply to credit unions that develop mobile technology programs:

### Third-party Agents

Credit unions are responsible for verifying their customer's identity based on reliable, independent source documents, data or information. In some countries, they delegate this task to a third party, such as a store owner or cellphone airtime vendor, but credit unions are ultimately liable for any violations that occur. The credit union accepts a broad range of identification forms (paper or electronic) to enroll members. They analyze and account for potential fraud and abusive practices within each collection method.

Since national agent licensing and registration differ widely, agent training and monitoring on KYC procedures is crucial to maintaining regulatory compliance.

### Remote Account Management

Credit unions mitigate AML/CFT risks by limiting account sizes, account functionality and the volume of transactions, deposits and withdrawals through mobile devices. In addition to AML/CFT compliance, credit unions adhere to prudential regulations, consumer protection standards, data security compliance and product-specific requirements. This includes how deposit accounts can be accessed via the cellphone and thresholds on mobile deposits, balances and transaction sizes. In the case of credit union field officers performing remote transactions, deposits through the smartphone can be insured in the event of accident, theft or natural disaster.

### Mobile Transaction Monitoring

Credit unions may use a risk-based monitoring approach for mobile transactions after evaluating the risks associated with specific clientele, accounts, products and/or services, especially as they apply to low-value transactions. Credit unions need to balance the perceived money laundering or terrorist financing risks with their technical capabilities and the level/type of customer information available.

As networks, credit unions can significantly reduce compliance costs by accessing centralized software systems that monitor compliance for the entire group. This is particularly helpful for small credit unions in developing countries where staff resources are already spread thin.

<sup>3</sup> Standards regarding AML, CFT and KYC regulations are derived from the Financial Action Task Force (FATF) *40 Recommendations*. The document provides a complete set of guidelines for countering money laundering in regards to the criminal justice system and law enforcement, financial system regulation and international cooperation. Considerations outlined here

are based in part on FATF's *Anti-money laundering and terrorist financing measures and financial inclusion* (2011), which provides a guide for applying the standards without compromising financial inclusion. World Council was a member of the project group that contributed to this document.

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