REDCOOP

THE FORMATION OF A CREDIT UNION DATA NETWORK

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DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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The authors take responsibility for any errors or omissions.

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EXECUTIVE SUMMARY

The work associated with this report was made possible by the United States Agency for International Development (USAID) through Cooperative Agreement N° 518-A-00-02-00102-00, "Strengthening Credit Unions In Ecuador". The project awarded to the World Council of Credit Unions, Inc. (WOCCU) is based in Quito, Ecuador. One of the primary goals of the project was to form a credit union based data network on a national scale. The name chosen for this network was "REDCOOP", which means "Credit Union Network" in Spanish. The purpose of this paper is to discuss this objective in detail.

There are approximately 60 credit unions in Ecuador with a total membership of over 1.5 million. Considering the total population of Ecuador, this number equates to a penetration rate of over 18%, the highest in Latin America. In terms of penetration rates in Latin America, Uruguay is second with 17.17% and Honduras is third at 12.39%[1]. Credit unions have played an important role in the Ecuadorian economy and through the years have reached a maturity level where forming a credit union data network was the next logical step. By establishing a network, members gain access to account and services among participating credit unions throughout the country, creating a multiplier effect with the points of service and number of branches in which to conduct credit union business.

Ecuador's first credit union data network was completed in less than two years. In that time, the project performed detailed network communication feasibility studies to design how the credit unions would actually link together via the network, developed software that would help the credit unions "talk" to each other once the links were put in place, rigorously tested the reliability of the links and the software to make sure they would work correctly, drafted rules on how the network would operate and how the credit unions would work with each other, developed marketing campaigns prior to the launch of the network so the general public would find interest in using it.

The experience gained from setting up a credit union network has generated a knowledge base of how to connect credit unions, promote sharing of information, and enable innovations to occur with new products and services. Cost sharing has helped the credit unions to lower their expenses. Increased access to services in multiple locations has improved credit union membership retention and satisfaction. The ability to effectuate transactions in real time has offered increased security and accuracy. The image and reputation of the credit unions has been enhanced. The creation of this network has taken the credit unions to the next level in serving their membership.

[1] "Credit Union Statistical Guide," World Council of Credit Unions, Inc., 2004.

INTRODUCTION

In 2003 the World Council of Credit Unions, Inc. (WOCCU) was awarded funds by the United States Agency for International Development (USAID) Cooperative Agreement N° 518-A-00-02-00102-00, "Strengthening Credit Unions In Ecuador". The project based in the capital city of Quito was commissioned to carry out three major objectives:

1. Help a variety of credit unions not licensed by the Superintendancy of Banks to obtain the necessary standards to obtain the licenses.
2. Create a training program for credit union directors.
3. Facilitate the creation of a credit union only data network on a national scale.

The goal of this paper is to discuss the third objective, the creation of a credit union data network, with the hopes that experiences and information can be shared that will facilitate other credit union movements who may be seeking to expand their financial service offerings via a data network.

What is a network?

A network can be defined as a group of users who decide to interconnect to each other for the purpose of sharing information for a higher purpose (such as offering financial services in this case). The name chosen for the network in Ecuador was "REDCOOP", which means "Credit Union Network" in Spanish.

Shortly after the project started, WOCCU strategically identified thirteen credit unions to be part of the initial launch of the network. The pilot credit unions were chosen based on the following attributes:

1. Proactive Management. In as much as this was a project to be started from the ground up, and not something that was tangible that the credit unions could see with their own eyes and have immediate faith in, the project carefully identified credit unions whose leadership was amenable to future growth through innovation and technology.
2. Stable Financials. Selected credit unions needed to prove commitment to safe and sound financial discipline using WOCCU's PEARLS Monitoring System. PEARLS is a software application that allows the user to enter credit union financial data and then compare them to established standards/goals in Protection, Effective Financial Structure, Asset Quality, Rates of Return and Costs, Liquidity and Signs of Growth.
3. Desire to Grow Through New Products and Services. To remain competitive credit unions need to keep pace with the market and constantly be looking for ways to offer new products and services.

The 13 credit unions are:

Project Credit Unions				
Name of Credit Union	Branches	Location	Membership	Assets USD
COAC Cámara de Comercio de Quito	10	Quito	39,961	$14,653,640
COAC San José de Chimbo	4	San José de Chimbo	20,348	$10,824,400
COAC Pastaza	3	Puyo	21,259	$10,677,340
COAC Biblián	2	Biblián	9,072	$10,563,920
COAC Juventud Ecuatoriana Progresista	2	Sayausí	59,245	$37,907,681
COAC Riobamba	6	Riobamba	43,383	$39,039,650
COAC CACPECO	8	Latacunga	41,494	$27,869,420
COAC Tulcán	5	Tulcán	36,683	$14,451,350
COAC Cooprogreso	18	Pomasqui	90,000	$42,852,200
COAC Mushuc Runa	7	Ambato	63,640	$28,433,000
COAC 23 de Julio	9	Cayambe	79,625	$29,078,290
COAC Oscus	6	Ambato	79,625	$46,163,360
COAC CC Ambato	12	Ambato	42,231	$13,781,248
13	**92**		**626,566**	**$326,295,499**

The pilot credit unions were presented with the objectives of the network and the associated benefits, such as:

- Increased access and service to credit union members;
- Ability to offer new products and services;
- Unification of credit unions to negotiate on a larger scale and reduce costs;
- Ability to effectuate transactions in real time, increased security and accuracy;
- Enhanced image and reputation of the credit unions, enabling better competition with other financial institutions.

Start-up Costs

With any project there are start-up costs. Every network will have different needs and priorities. Determining specific costs won't be possible until after the network design is solidified. The initial design is the one cost that will always be necessary before any other steps can be taken. Other costs will greatly depend upon the level of existing communication and technological infrastructures available. Typical start-up costs include:

- Development of a central switch. This includes a physical location (data center), staff, software, hardware and communication lines.
- Software programming between credit unions and the central switch.
- Software programming between the central switch and international switch (in the event that the network could connect to the USA Shared Branch Network for example).
- Development of shared branching transactional system (front-end) and related interfaces.
- Establishment of communication lines between all credit union branches.
- Establishment of communication lines between each participating credit union and the central switch.
- Desktop PCs for credit unions that don't have any computerized systems.

A crucial initial step is to clearly define the products and services to offer and the network requirements. At a minimum, provision of deposit, withdrawal and transfer services would enable any member of any of the thirteen credit unions on the network to visit ANY point on the network and be serviced as if s/he was conducting business in his/her own credit union. By "sharing branches," essentially all the credit unions on the network work together as one large credit union, helping to better service the members of all the individual credit unions.

The project learned a great deal about shared branching in the United States through a number of sources: the WOCCU partnership with the Colorado Credit Union League, the Credit Union Service Corporation (CUSC), the Louisiana Credit Union League and the New York Credit Union League. These international credit union partners helped to define the various requirements in the overall network design.

SECTION ONE: NETWORK DESIGN

Given the amount of resources needed to build communication channels for the network a first priority was to find in-country providers. Service providers were evaluated based on a number of factors, which include:

Basic Information

- How long has this provider been around?
- How many customers does this provider service?
- Who owns the company?
- Does this provider own its own network infrastructure? (It is common for businesses to offer services through someone else's infrastructure and simply charge enough to cover their costs and make a profit.)

Reliability

- Do they have political ties with other institutions that could create complications? (For example, one candidate provider's parent company was a direct competitor with several of the credit unions of REDCOOP. Although they offered a quality service, politically it would introduce too much risk.)
- Do they have sufficient local support?
- Do they have in-house information technology staff that could develop software?
- Do they have a clean track record? (Do people speak highly of their service or do they tell you all the problems they are having with them?)
- As a whole, how reliable has this provider been? It is recommended that several users/institutions of the existing network be visited in order to discern correctly its integrity. Reliability can be measured by service level availability percentages (how long have they been "up" during the month). An acceptable service level availability would be 99.5% (0.5% down time per month).

Competitiveness

- What communications standards are being used within the network?
- At what data transfer speed is the network able to perform?
- Who are the other available communication providers in the area?
- What kind of coverage do they have?
- What services to they offer?
- What are their costs?
- What does this provider specialize in? What is their core business?
- Who do they do business with?

Security & Sustainability

- Is their main data center located in a secure location within the city?
- Are there potential threats of earthquakes, flooding or other physical disruptions?
- Does the institution appear to be clean and orderly?

- Are there security measures in place to protect the main data servers and communication lines?
- Are contingency plans in place?
- What security devices are in place throughout the network (firewalls, intrusion detection systems, anti-virus software)?

As the credit unions participating in the network are located in various parts of the country in was difficult to find one provider for all participants. Minimal communication systems existed for the rural credit unions. The project took into consideration the costs of each type of communications available for each point (credit union location) on the network. In some cases, satellite communication was the only available option.

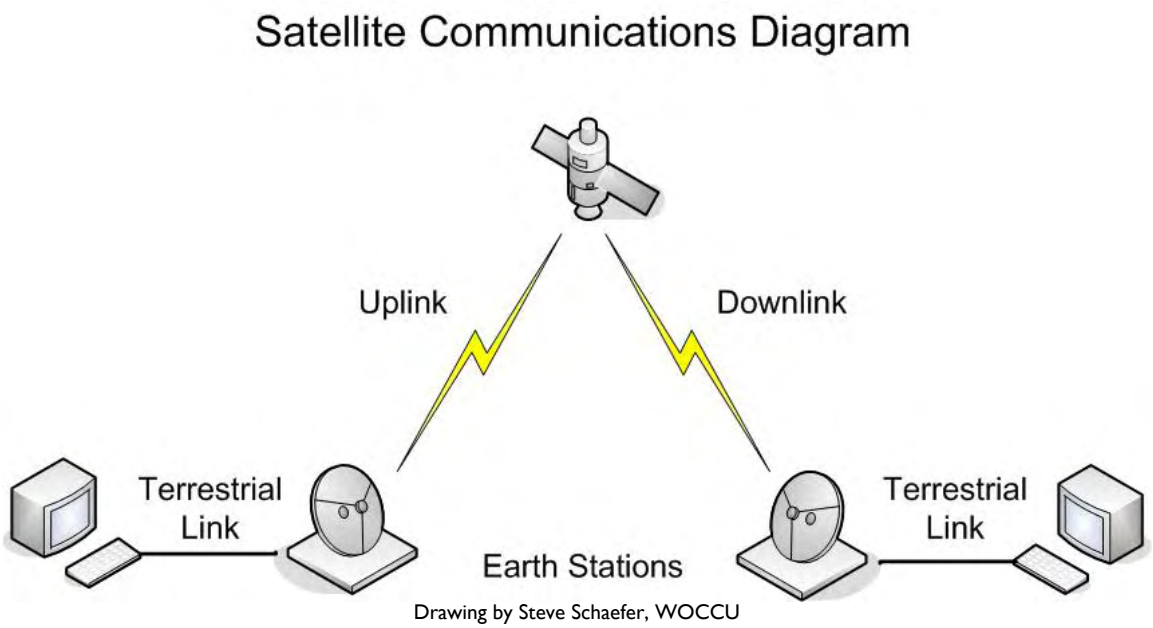
The following section describes the various communication types utilized in REDCOOP:

Dedicated Line (Frame Relay)

A "dedicated line" is a physical point-to-point connection using a wire, typically copper. The cost increases as distance increases. Frame relay, which uses dedicated communications lines, constitutes an economic alternative and flexible front to the solutions of a private network based on dedicated lines. It makes possible the sharing and dynamic allocation of resources for data transmission with the consequent economic saving. While the dedicated lines constitute a rigid solution at the time of modifying or extending the network, the frame relay service adapts to the changes in the topology of the Network and uses mechanisms that establish alternative routes within the data network in case of failure.

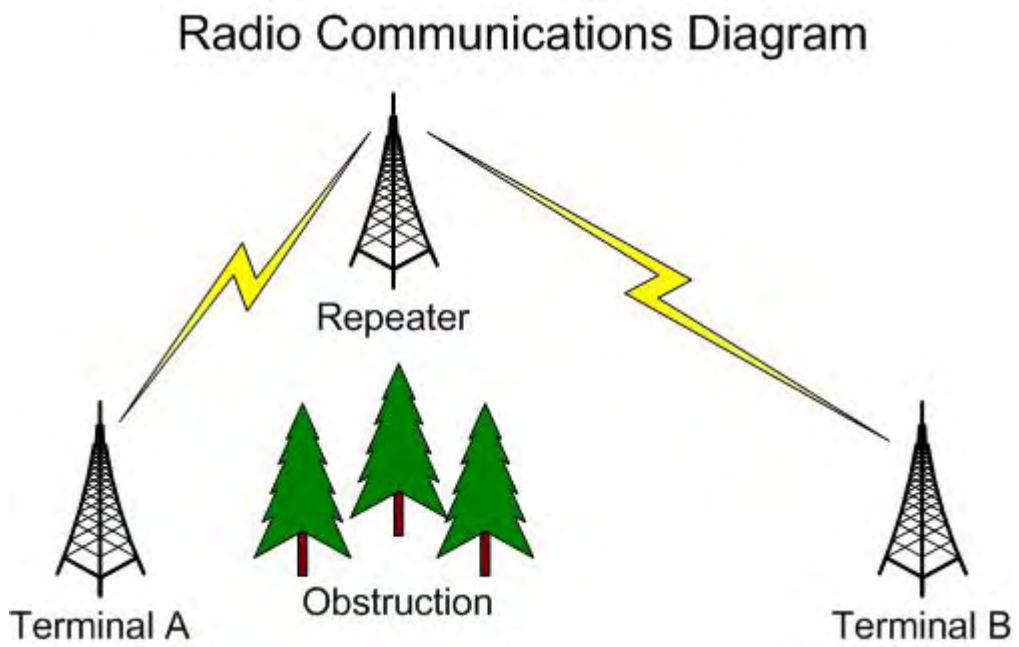
Satellite

Satellites offer more flexibility than other communication systems because they can be placed virtually anywhere. A satellite placed in the Earth's orbit is a radio signal repeater. The satellite system consists of transponder, a station based on earth to control the operation, and a user network of ground stations that provide the facilities for transmission and reception of communication traffic. A signal is sent from one transponder to the satellite (uplink) and then the satellite sends the information down to the corresponding transponder (downlink).



Radio

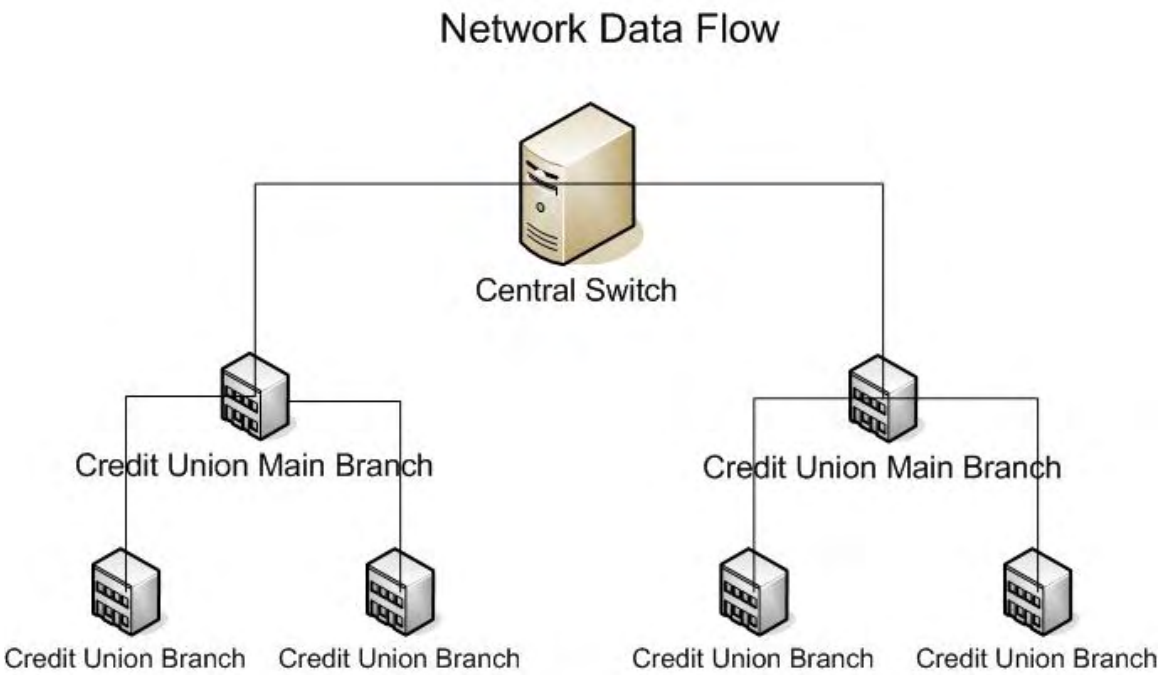
Due to the high costs of dedicated lines and satellite communications, radio data communications are very popular in many developing countries. Furthermore, institutions that utilize this technology are able to purchase their own equipment and therefore own their infrastructure as opposed to renting it from someone else. Data is passed using the same technology as a car radio except that it is channeled differently. As opposed to sending the signal out in a spherical manner in order to reach a larger audience in a smaller geographic region (3-5 km), the signal is emitted in a direct line to a listening antenna. Since the signal is concentrated in a single beam it is able to reach larger distances (upwards of 40 km). The signal however has to have a clear line of sight with the corresponding receiver which is typically located on a tower. Although the line of sight can prove to be complicated at times, Ecuador has the geographical advantage of the Andes Mountains, a perfect way to route signals without line of sight interferences. Once the signal reaches the receiver it can then be replicated to another tower or channeled down to the intended receiving institution. Since there are many different users of this technology, each emitter operates on a different frequency.



Drawing by Steve Schaefer, WOCCU

After having identified the availability of communications geographically, the project then investigated how each credit union communicates to their branches. The finding indicated that each credit union uses various types of communications, each communication type primarily selected by cost. As one goal of the network was to operate REDCOOP in real-time, it was necessary that every branch of every credit union on the network be connected. In some cases, this meant that credit unions had to connect distant branches for the first time.

The next step involved sketching a network diagram illustrating the connection mechanism for the 92 service points. The most efficient connection mechanism involved first connecting all branches to the main credit union (the "mother" branch) and then connect all the mother credit unions to a centralized switch (Please see "Network Data Flow" below). Through the use of soft and hardware, the central switch acts as a data interpreter and routes the information in the right direction and to the correct recipient.



Drawing by Steve Schaefer, WOCCU

Since all credit union-to-credit union transactions pass through the central switch, it is critical to house the switch in a protected environment with continuous 24 hour/7 days a week support. The software (switch) provider needs to be able to develop various software programs in order to enable the mother credit unions to link/talk to each other. In order to ensure that the switch provider is strong technically and has sufficient experience, separate firms were selected to undertake software development and communications provider.

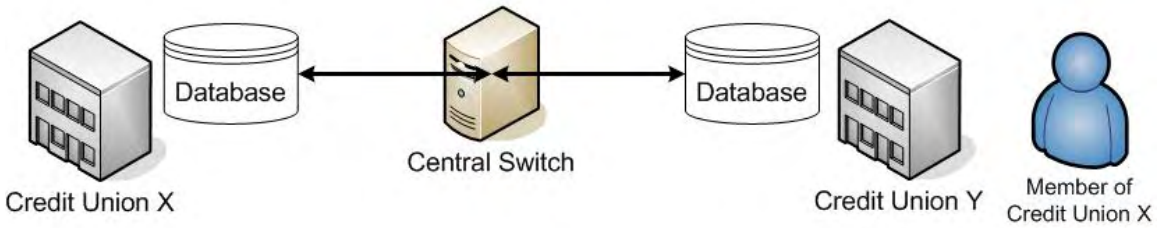
Shared Branching

Shared branching started in the United States in the 1980's when credit unions signed cooperative agreements allowing members from one credit union to visit another credit union to conduct transactions. This initially happened with pockets of credit unions within the same state. The idea became so popular that eventually the individual states decided to form a national network that would allow credit unions to process transactions across state lines. In 1993 the first out-of-state transaction was performed. Today there are over 1200 USA based credit unions utilizing shared branching. Individuals are able to make deposits, withdrawals and transfer funds at any of the 1800 locations (including branches of the credit unions on the system) just as if they were in their own credit union. Participation in the network brings convenience, widespread availability, no additional costs to members and prevents credit unions from investing large amounts of money on constructing new facilities.

There are three main components to shared branching: the sender, the receiver and the data switch. The sender and the receiver are both distinct credit unions, not branches from the same credit union. They could be located anywhere in the country and could be running any type of transactional software/database. The central data switch

provides a blue print of their system to the sender and the receiver so that they can in turn write computer code that will be able to correctly translate data from their credit union database to the central switch. Communication lines between the credit unions (sender/receiver) and the switch are then established. Test transactions are sent from each credit union to the central switch for approval. This is to ensure that the central switch understands all possible transactions types it could eventually receive. If the testing is found to be successful, the switch provider then notifies the credit union that they are certified to perform shared branching transactions on the live network.

Data Flow of a Shared Branch Transaction



When a member from credit union X visits credit union Y, the teller at credit union Y enters the account number of the member in their system. A data request is then sent from credit union Y to the switch. The switch then interprets the request and forwards it on to credit union X. When the request arrives at credit union X, permission is given to access the database. The necessary account details are read and sent back to credit union Y in the same manner the request arrived. This whole process is considered to be the "back-end" of the system.

Drawing by Steve Schaefer, WOCCU

A "front-end" is also necessary to originate the transactions. This is a simple software program with a graphical user interface (GUI) that tellers use to perform transactions. The idea is to have checks in place so the data is entered correctly and the tellers can quickly and efficiently perform transactions.

Remittances

Another service of great importance that has influenced the design of the network are international remittances. A remittance is a payment sent from one person to another. In today's common usage, it is often thought of as the portion of an immigrant worker's earnings sent back to family members/friends in his/her country of origin. As the scale of international migration has increased in recent years, remittances have taken on greater significance: they connect families across borders, increase standards of living and contribute to the growth of country economies. WOCCU, its member affiliates in the Latin America and the Caribbean region and its money transfer partner VIGO Remittance Corporation (VIGO) are actively engaged in expanding the reach of remittance distribution and integrating unbanked receivers into the formal financial system. WOCCU has worked to reduce the transaction fees that remittances senders pay. Non-credit union members (including undocumented immigrants) and credit union members alike can send international money transfers from participating credit unions in the United States and at over 4000 VIGO Agents.

International money transfers help sustain economies of emerging markets, including Ecuador. The World Bank estimates that workers' remittances amounted to $88 billion dollars worldwide in 2002[2]. The Inter-American Development Bank (IDB) estimates that $32 billion in remittances was sent to the LAC region in 2002. Remittances are "the single most valuable source of new capital for Latin America and the Caribbean…more important for the region's economic and social development than foreign direct investment, portfolio investment, foreign aid or government and private borrowing."[3] As WOCCU operates the International Remittance Network (IRnet), it has been convenient to integrate remittances into the REDCOOP system.

Another integral piece of the design relates to compatibility. In order to make sure that REDCOOP is compatible with foreign data networks and higher-level products and services such as credit cards, debit cards and ATMs, the network follows the ISO8583 data standards. These standards represent a blue print of how data systems should talk to each other. It allows different systems to speak the same language as long as the standards are followed. The US Shared Branch Network uses these standards making it possible for REDCOOP to link up to the US Shared Branch Network and/or other service providers.

The final step involved selection of the providers. The project chose to contract MultiSoft as the software developer for the "back-end" and "front-end" systems as well as the monitoring of the central switch. Multisoft, based in Quito, Ecuador, was founded in 1990 and specializes in the development and commercialization of software for financial institutions. Their products and solutions satisfy the necessities of security, communications and channels of access. As for the communications side, each credit union contracted their own providers. Many of them joined together to form a single contract that lowered costs for all involved.

Once all these steps were completed, the network diagram was drawn up (shown on next page).

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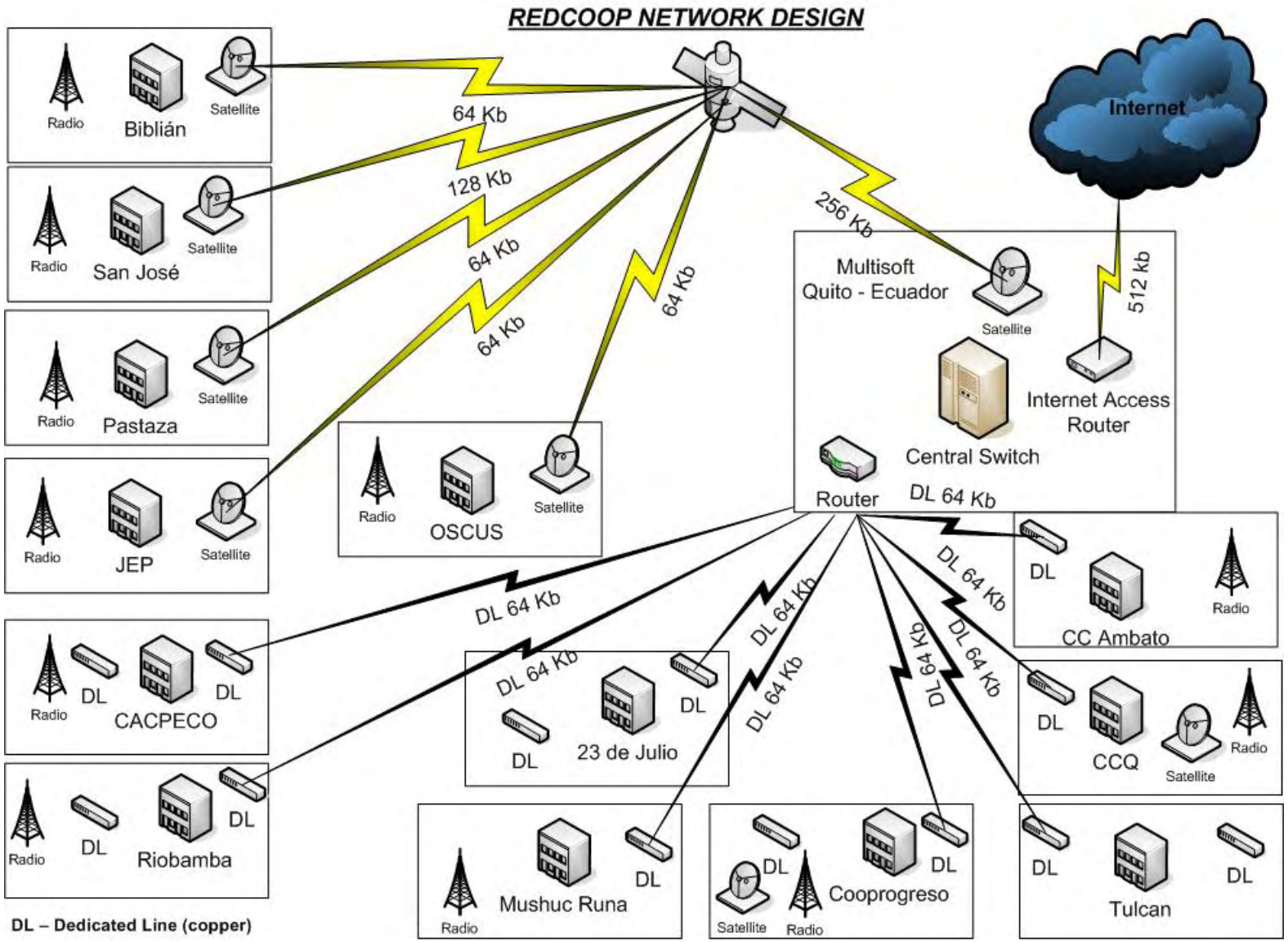
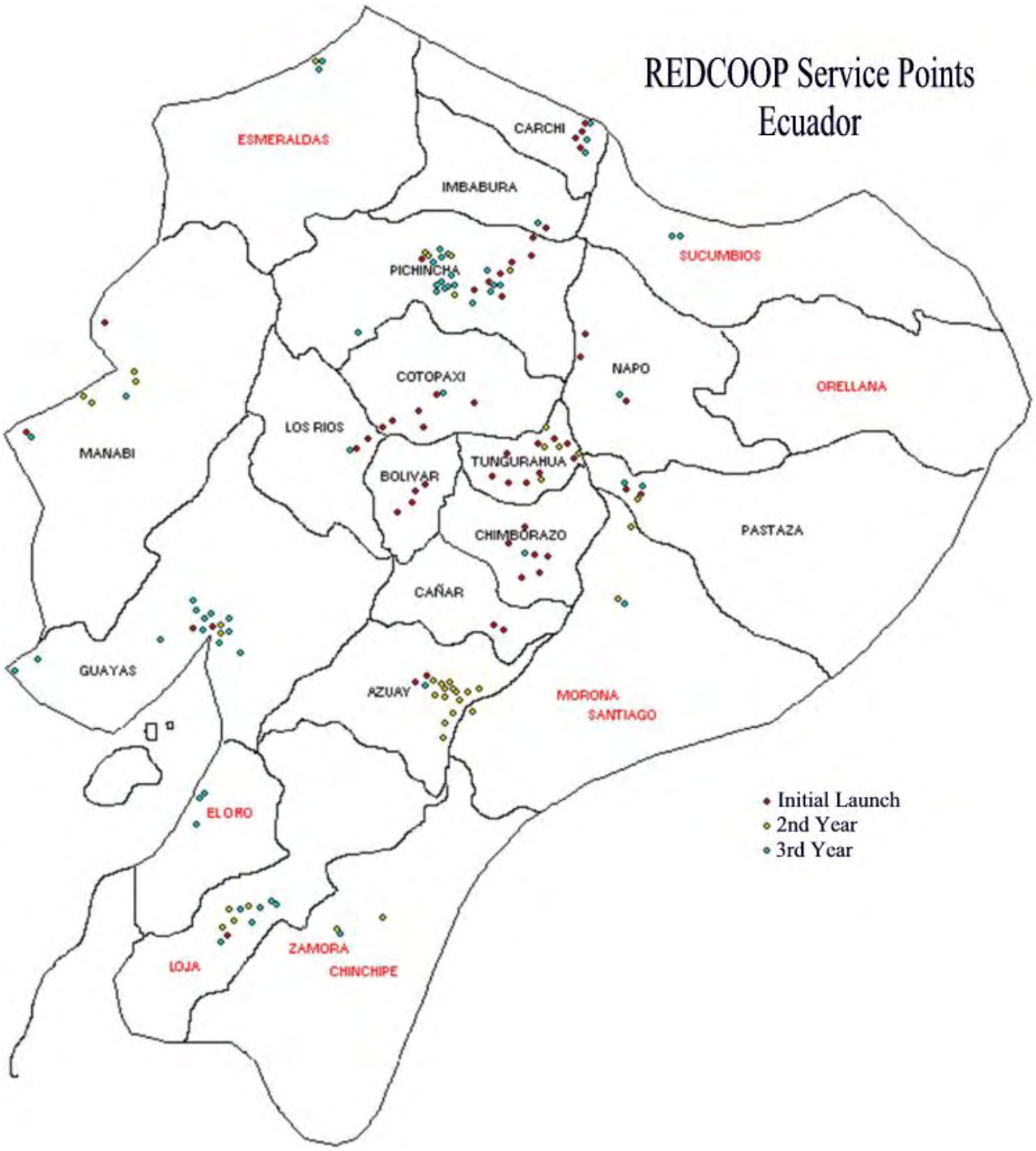
2 Ratha, Dilip. "Workers' Remittances: An Important and Stable Source of Development Finance," The World Bank, Washington, DC, October 16, 2003.

3 Inter-American Dialogue. "All in the Family: Latin America's Most Important International Financial Flow," Report of the Inter-American Dialogue Task Force on Remittances, Washington, DC, January 2004, p. 3.



Drawing by Jaime Maestre, WOCCU



Drawing by Jaime Maestre, WOCCU

The diagram above depicts where the various service points are located throughout the country. Note that the communication types to the **inside** of the diagram are the means by which the main credit union branches connect to the central switch (MultiSoft). The communication types to the **outside** of the diagram represent the means by which the main credit union branches communicate with their other branches.

Plans are in place to launch additional points in the next two years. Those providences in red show where REDCOOP does not have coverage as of this writing. However, in

every providence, save Orellana, there are plans to open new service points. See the service point table on the next page. REDCOOP truly is a national network.

2005 Service Points	
Credit Union Name	Number of Branches
COAC Cámara de Comercio de Quito	10
COAC San José de Chimbo	4
COAC Pastaza	3
COAC Biblián	2
COAC Juventud Ecuatoriana Progresista	2
COAC Riobamba	6
COAC CACPECO	8
COAC Tulcán	5
COAC Cooprogreso	18
COAC Mushuc Runa	7
COAC 23 de Julio	9
COAC Oscus	6
COAC CC Ambato	12
2006 Service Points	
COAC Jardín Azuayo	21
COAC MEGO	6
COAC 15 de Abril	7
COAC Calceta	2
2007 Service Points	
COAC Accion Rural	7
COAC Textil 14 de Marzo	6

SECTION TWO: NETWORK DEPLOYMENT

Taking the network from a design on paper to a reality proved to be the most challenging part of the project. The biggest challenge for REDCOOP is to achieve buy in from the credit unions. One of the critical factors to achieving buy in was to not change their current information systems. Some credit unions made significant investments in the last 2-3 years to upgrade their technologies and IT systems. It was unrealistic to ask them to invest again in a new system so that there was a necessity to work around and with each credit union's current system.

All the credit unions involved are utilizing one of four different information systems:

COBIS

In the early 1990s, Macosa, responding to the advent of open systems and client-server architecture, developed an entirely new system, named COBIS (Cooperative Open Banking Information System). Today, in addition to being a full-service integrator and solutions provider in its home market of Ecuador, Macosa is a developer and international provider of software and services, specializing at home and abroad in the banking sector and now in the credit unions sector.

COOPERANDO

COOPERANDO is a system developed by Multisoft in early 2001. This system is based on client-server technology. The system was developed through a joint project with one of the REDCOOP credit unions. Multisoft is a developer and international provider of software and services.

CONEXUS

CONEXUS is a software application created by the Ecuadorian company AVMEI for the registry and control of financial operations of credit unions.

SISTECOOP

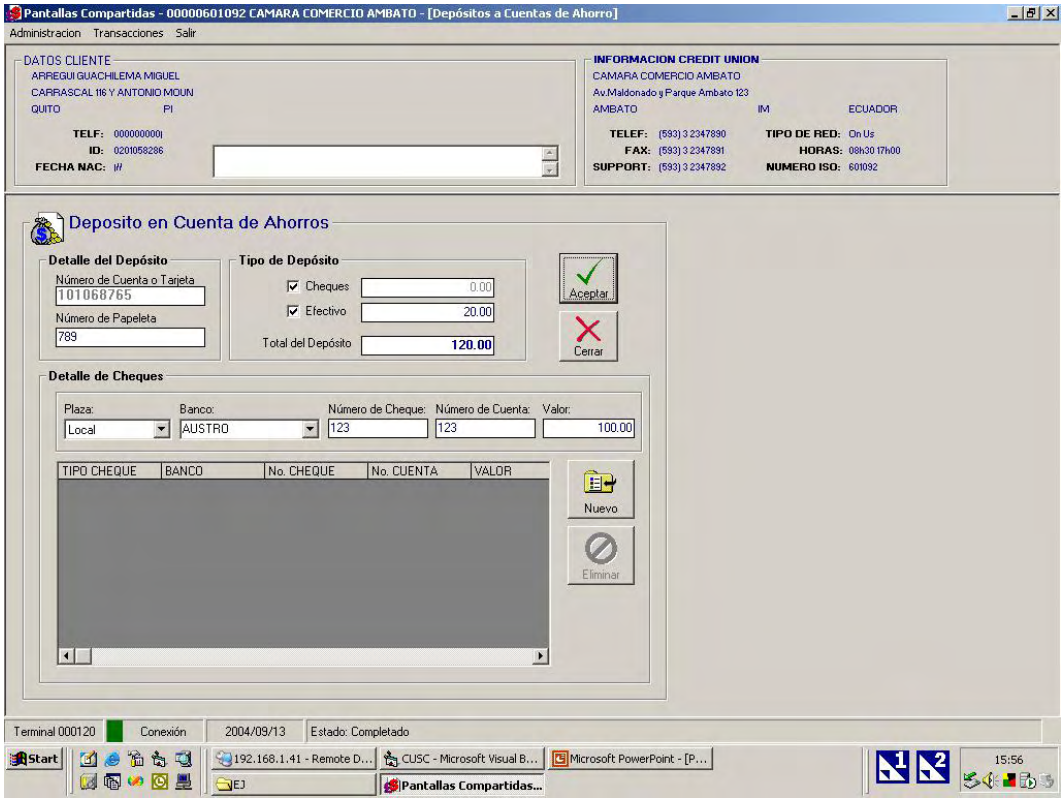
In the beginnings of the 90's, several organizations that service the national credit union system came together to create SYSTECOOP, software designed to help manage day to day credit union operations.

After consulting with MutliSoft, the project decided to create a software program for each of the four systems (COBIS, COOPERANDO, CONEXUS, SISTECOOP) that would then translate the information from that particular system and send it to the central switch. In order to accomplish this task, the project had to work closely with MultiSoft and with each of the four software providers. Essentially there was a need to break down every database field in each of the software packages to determine how to gain access to the necessary data. In some cases, the providers did not want to cooperate initially. Getting the necessary information required a look "inside" the software packages, something that most software providers aren't usually willing to allow

an outsider to do. This was made possible by through the help of the clients of the software providers (the credit unions).

Once the translation software (for all four systems) required to communicate to the central switch was designed, rigorous testing was performed. Since there were still no communication lines setup to the central switch yet, WOCCU staff and programmers from MultiSoft had to travel to each point on the network with a replica central switch. While at the credit union they physically connected the replica central switch to the credit union's IT system and tested every possible transaction type while on site. This had to be performed on a case by case basis until every point was certified.

Once all the credit union software packages were successfully translated and the corresponding software to send the data translations was tested, it was time to finally create the front-end software that the tellers would use to perform transactions. CUSC was kind enough to show the project the software they developed for this use in the United States. This was then translated from English to Spanish and additional changes made to make it compatible with Ecuadorian culture. For example, citizens of Ecuador carry two last names as opposed to one in the US. Dates are displayed differently as are decimals and commas in financial figures. All of these differences had to be taken into account as the system was developed. Just as the translation software had to be tested so did the front-end system. The front-end system, named "Pantallas Compartidas" ("Shared Screens" in Spanish), is shown in the screen shot below.



In conjunction with the software development, communications installations were developed. Specifically the creation of data communications between the credit union's branches to the main branch and from the main branch to the central switch housed at MultiSoft. Since each credit union contracted their own provider it was out of the control of WOCCU to push the credit unions to make this happen. Many, however, allowed WOCCU to follow-up with the communications providers and work directly with their IT staff. Testing of the communications between every point on the network to MultiSoft was also essential. Every service point needed to be certified before they could be deemed "ready". Problems were identified with some of the communications links as they proved to be unreliable. In these cases the project encouraged the providers to improve their technology and make additional investments so the service could be usable. For example, some credit union branches connect to the main credit union branch via radio waves. If one of the credit unions is nestled within a mountain canyon it is very difficult to receive a signal. The project then had to work with the providers to install new towers in strategic locations so signals could be received.

SECTION THREE: NETWORK GOVERNANCE

Since REDCOOP is a network of several different credit unions working together, policies and procedures needed to be agreed upon before the system could go live. With this end a Network Management Committee (NMC) was formed. Members of the committee are designated by the following manner:

1. One member of FINANCOOP's board of directors is designated according to a vote done within the organization. FINANCOOP is the corporate credit union of Ecuador and settlement agent for REDCOOP.
2. A secret voting of all the CEOs of REDCOOP is taken and the four CEOs that receive the most votes are designated members of the committee as long as they are not part of the board of directors of FINANCOOP.
3. Members of the committee are asked to serve for a period of two years and may be reelected.

The general manager of FINANCOOP participates in the meetings of the NMC. S/he may voice their opinion but they are not able to vote and also act as the secretary to the committee. If for some reason the credit union of one of the NMC members is removed from the network due to non-compliance or other reasons stated within the rules, they are also removed from the NMC. If a change in CEO occurs at one of the credit unions whose CEO is part of the NMC, the new CEO assumes his predecessor's spot.

It is through the NMC that policies and procedures of REDCOOP are created and enforced. The current number of policies is too great in number to detail in this report, but some of the more critical policies are as follows:

- A President of the NMC is named within 8 days of an election. The President is chosen by vote amongst the five members of the committee.
- The NMC requires the presence of at least 3 members in order to meet. The NMC can meet virtually (conference calls for example) as long as all members have the necessary documentation (financial reports, agendas) available to them before the meeting starts.
- All actions requiring votes of the members of the NMC must be found in the majority (at least 3) in order to pass.
- Other duties of the NMC include: approving new credit unions to join the network, approving the policies and procedures of the network, approve the branding rights and policies of the network, approve the required hours of service that all credit unions must uphold, determine the prices involved with performing transactions, determine maximum prices that credit unions of the network can charge to members in order to use network services, define standards of quality for the members of the network, perform quality assurance evaluations periodically of members of the network, approve all service points of the network according to the quality standards put forth by the NMC, approve the marketing and promotional strategies of the network, market and promote the incorporation of additional credit unions into the network, approve all temporary

and permanent suspensions of participating credit unions of the network, be responsible for contracting and renewing all shared contracts that impact the network (such as service providers), contract a third party auditing firm to make sure the network is functioning correctly and the financial reporting is accurate.

- To become a member of REDCOOP the following requirements must be met: be an active member of FINANCOOP, has at least one million dollars in assets, have at least three years experience as a legitimately recognized credit union, have a minimum risk rating of "B", be ranked at or above the average liquidity index according to the super intendancy of banks, have a delinquency rate of less than 10% of total loan portfolio, meet the minimum requirement of having at least 3% of total assets in reserves, maintain a reliable communications connection to the central switch, receive certification of system compatibility from the central switch.
- Obligations of the participating credit unions of REDCOOP include: sign the policies and procedures agreement set forth by the NMC, service members of other credit unions of REDCOOP in all of their branches, market all points of service within REDCOOP, display the REDCOOP logo outside of each branch, pay the corresponding fees to other members of REDCOOP as constituted, support economically the national marketing campaigns of REDCOOP, implement and maintain internal controls for the protection of all credit union members, maintain minimum customer service hours as dictated by the NMC.
- All credit unions may not solicit or market to credit union members of other credit unions in REDCOOP.
- Credit Unions of REDCOOP must consult with the NMC if they would like to join an additional network.
- Credit Unions in violation of the following rules are in jeopardy of being removed from REDCOOP: when they are judgments against the credit union by the super intendancy of banks, when the credit unions do not honor their debts to REDCOOP, if documented evidence is shown that a participating credit union is performing transactions with another network without prior permission of the NMC.

Once the credit unions viewed this network as **their** network, their desire to take ownership improved. Transitioning the operations of the network from WOCCU to REDCOOP was an essential part of the success of the network. This transition was made possible through the introduction of network governance.

SECTION FOUR: NETWORK PROMOTION

The promotion of REDCOOP started at the credit union level. Several training classes were put on in various regions of the country to give tellers and managers hands on experience learning the transactional software of REDCOOP. Specialized courses were also offered on remittances. These courses were designed and administered by WOCCU.

The logo, shown below, was created by a professional graphic artist and was one of many in consideration. All credit unions of REDCOOP were required to show the logo outside and inside of their branches.

In addition to having the logo displayed in the credit union, promotional items were also developed to give to credit union employees and members. These include pins, stickers, pens, stationary, calendars, brochures and post cards. Brochures are available in the credit unions so members can see where additional service points of REDCOOP are. They also inform members of the products and services available to them. Post Cards were developed so family members in Ecuador could send the post card to loved ones in the United States. The post cards describe how they can send remittances to them via REDCOOP.

A professional publicity firm was contracted to create video based trainings and TV spots. A variety of radio ads describing the benefits of RECOOP were also developed.

SECTION FIVE: NETWORK LAUNCH

REDCOOP went live in the end of May 2005. All the participating credit unions came to Quito for an official launch commemoration.

The initial success of remittances was better than expected. In a six month period, nearly US$ 3 million dollars were transferred via REDCOOP. 2006 projections reveal 20,000 transactions in the next year.

REDCOOP Remittances 2005			
Month	Transactions	Amount USD	Avg. USD
May	2	600	300
June	1,061	321,505	303
July	956	343,124	359
August	997	360,097	361
September	1,128	414,589	368
October	1100	384,081	349
November	1322	464,644	351
December	1558	461,900	296
TOTAL	**8,124**	**2,750,540**	**336**

With any brand new product introduced to a market, it takes time for the product to gain market recognition. Shared Branching transactions started out slowly and continue to gain momentum.

REDCOOP Shared Branching Transactions 2005			
Month	Transactions	Amount USD	Avg. USD
May	1916	$198,126.60	$103.40
June	3525	$101,242.21	$28.72
July	3133	$147,476.66	$47.07
August	3771	$201,700.52	$53.48
September	3266	$163,754.10	$50.13
October	3092	$163,488.27	$52.87
Novemeber	2488	$118,024.52	$47.43
December	2557	$161,391.74	$63.11
TOTAL	**23748**	**$1,255,204.62**	**$55.77**

REDCOOP plans include an expansion of product and service offerings. The major focus for 2006 will be debit and credit card programs. No credit union in Ecuador has been able to offer credit cards without the assistance of a partner bank. The credit unions are looking to REDCOOP to fill this need. In addition, plans are underway to link REDCOOP to the US Shared Branching Network. This will allow Ecuadorians in the US to access their REDCOOP accounts and transfer funds accordingly.

CONCLUSIONS

Many lessons have been learned along the way during the creation of REDCOOP. While every situation is different, it is probable that the circumstances and challenges experienced in Ecuador will recur in other settings.

Challenges

- Internal politics among the credit unions was a very real problem. Prior to the start of the project several groups of credit unions had started their own networks. These networks however were only with 3-4 other credit unions and were designed to be regional. They were also limited by the products and services they offered. The competition between the existing credit union networks created a very difficult political environment for the project to navigate. Perhaps one of the greatest successes was the ability to bring several of these networks together to form one unified national network.
- The project found it very difficult to find and interpret the necessary government policies and rules with respects to data networks in Ecuador.
- The component of linking REDCOOP to the US Shared Branch Network turned out to be a major legal undertaking. As of this writing pieces are still being finalized. However, the legal work will be of benefit to credit unions around the world as WOCCU assists with reforming and addition to credit union law.
- Data communications in Ecuador are over-priced because of the lack of free market competition. The prices, in some cases, are five times that of US prices. The credit unions had to budget accordingly in order to be able to connect to the network, some at great sacrifices. The few communication providers that exist in Ecuador need to see the benefit of offering more economical means for institutions to obtain their services so country-wide innovation can take place.
- Geography proved to be a challenge as it made it difficult to get data communications into rural points of the network. For example, credit unions in mountainous regions don't have the straight line of sight for radio communications that credit unions in the Amazon region have.

Lessons Learned

- Having the right staff for the job makes all the difference. The human resources working on in the establishment of the redcoop system have proven the necessary experience and skills to carry out the requirements of the project.
- It is important to have a shared vision. The vision is to create a network for all of the credit unions, not a network for just WOCCU or any other single entity. We wanted everyone to be a part of the success of the network. Without this shared vision it would have been difficult to have success.
- It is important to listen to the needs of the credit unions and fulfill their needs. The project spent time in the design phase to make sure everything in the scope of the network made sense and was desired by the credit unions. The products and services offered by REDCOOP are a direct result from the inputs of the

credit unions. Further consideration was given to the credit unions' IT systems and how to work with and around them.

- When it comes to creating a network it is vital to partner with strong providers. They don't necessarily have to be the biggest, but they have to have the experience, capacity and staff to deliver.

Other countries that do not possess credit union only data networks can learn from the REDCOOP experience. Forming a national network requires three things: 1) credit unions that are willing to come together with a shared vision, 2) reliable communication infrastructures, 3) qualified people to make it happen.

The benefits of creating a network such as REDCOOP are undeniable. When credit unions come together and share information, innovation takes place. Ultimately new products and services will be offered that keeps them in line with the competition. Cost sharing takes place that helps the credit unions to lower their expenses. New markets are captured as the credit unions are able to serve segments they were unable to previously. Increased access in multiple locations improves credit union membership retention and satisfaction. The ability to effectuate transactions in real time offers increased security and accuracy. The image and reputation of the credit unions are enhanced and therefore are better able to compete with other financial institutions.

The creation of REDCOOP is not only a story of innovation; it is also a story of inspiration. Have you ever heard of a bank opening their doors so the competing bank's customers can perform transactions there? This is essentially what REDCOOP has done; it has brought credit unions together in a spirit of what they are all about: **coop**eration. This is the credit union difference! REDCOOP has reminded the Ecuadorian credit unions why they came into existence in the first place: to serve their members in a spirit of cooperation. It is through this cooperative spirit that they have now become the largest credit union only data network in the country. It is through this cooperative spirit that they will indeed continue to find success.

Annex 1 - Acronyms

COAC – Credit Union (Spanish)
CUSC – Credit Union Service Corporation
DL – Dedicated Line
GUI – Graphical User Interface
IT – Information Technology
Kbs – Kilobits per Second
NMC – Network Management Committee
USAID – United States Agency for International Development
WOCCU – World Council of Credit Unions, Inc.