



**USAID**  
FROM THE AMERICAN PEOPLE



**Volunteer Name: Aaron Cohen**

**Country: Ethiopia**

**Country project: Grains**

**Host: Oromia Credit and Saving Share  
Company (OCSSCO)**

**Venue:**

**Audience:**

**Number of people: 12**

**Date: March 24, 2017**

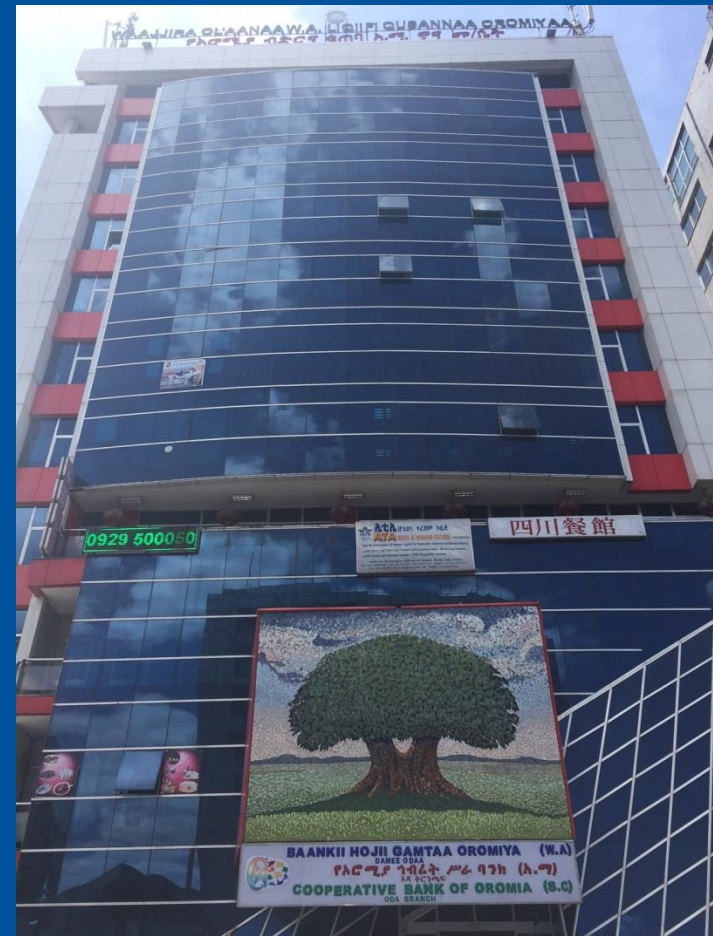


# Aim of Presentation

1. Introduce stakeholders to OCSSCO organization, project, and challenges.
2. Provide brief introduction to the IT team and their work.
3. Present objectives of assignment and progress during this week.
4. Present assessment of needs.
5. Propose ongoing solutions.

# OCSSCO Project Background

- Microfinance Institution (MFI) based in Oromia region.
- Currently 300 branches and expanding rapidly to 1000 branches over the next 3 years.
- Primary issue IT team has, and focus of project is implementation of a Core Banking System (CBS), which is essentially a database and software platform used to manage transactions.
- 80 branches are currently using the CBS either partially or completely, but 200+ branches are manually writing down transactions, sending to area teams which input this information into excel, and then in turn send spreadsheets to headquarters to input into the CBS.



# IT Team

IT Director



System  
Administrators



Database  
Administrators



Programming  
Team



Business Team



IT Security



# 1. Assignment Objectives as in SOW

- 1) Assist OCSSCO in identifying the available technologies/software that enhance the financial data management of the company.
- 2) Support the operation of the core banking system.
- 3) Assess the existing information system gaps and look for best alternatives.
- 4) Develop guidelines for effective operation of the system.



## 2. Achievement of the assignment objectives

### Objectives 1 and 3

- 1) Assist OCSSCO in identifying the available technologies/ software that enhance the financial data management of the company.
  - 3) Assess the existing information system gaps and look for best alternatives.
- Established with IT Director, Megersa, as primary focus of the week
  - Met with director as well as each team individually to evaluate:
    - Technical Fluency, Skills, and Experience
    - Primary Functions of Each Team
    - Current Projects, Capacity to Complete Projects, and Workload
    - Challenges and Need
  - Aim was to collect necessary information to achieve objectives 2 and 4 in the long-term with remote communication or via another trip and training

# Team Assessment Example

## Database Administrator Team

- Alemu, Sisay, and Endale
- All university educated with backgrounds in IT and Computer Science
- Average of 7 years of experience
- Although team members have experience, most of it is in teaching and their experience at OCSSCO is their first in an applied context
- They work on many different technologies and are less specialized than a Database Administrator would be in the US.
- Use mySQL, Oracle, MS Visual Basic





# Team Assessment Example



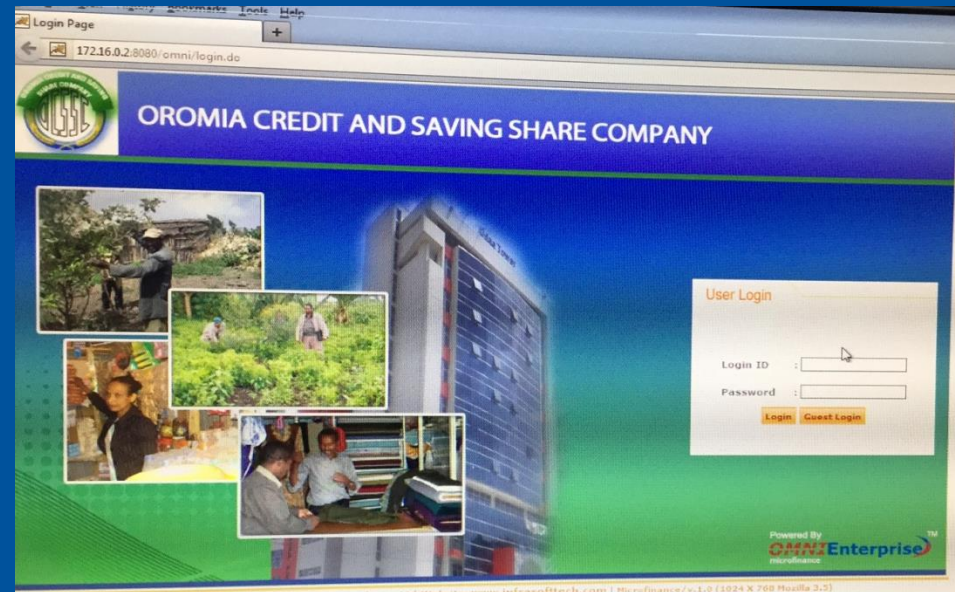
## Projects

- Migrating (inputting) excel data into a banking and content management system called OMNI.
  - Doing this for 80 branches
- Solving Data Issues with Branch
  - Primarily cleaning data, fixing inconsistencies
- Building Reports
  - Internal and external (National Bank of Ethiopia)
  - Includes data such as number of transactions in a region or average interest rates.
- Assisting Systems Team

# Team Assessment Example

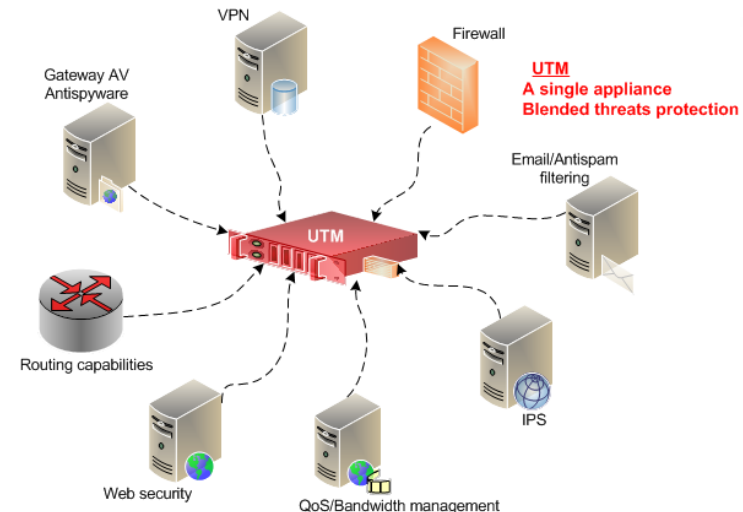
## Database Administrator Challenges

- Lack of technical capacity to rapidly improve systems in programming and in software applications: Java, C#, Visual Studio, Oracle, OMNI System.
- Absence of competitive contractors in Ethiopia to assist on a regular basis, even with finances.
- Entering data for branches and clearing backlogs prevents DBAs from creating more automated systems.
- Technical issues with OMNI system in its current implementation.





# Technologies and Platforms Used



## **2. Achievement of the assignment objectives**

### **Objectives 1 and 3 – Findings**

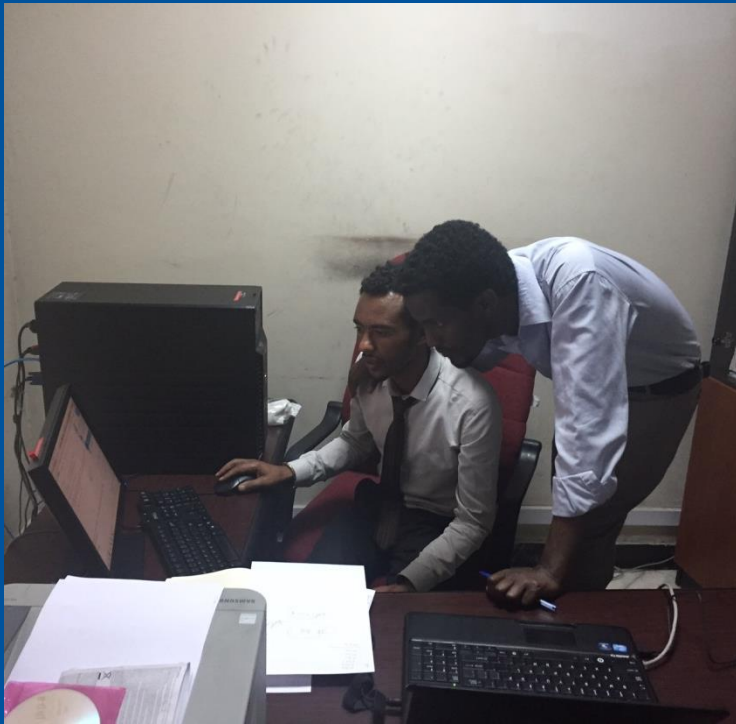
- Much of the implementation of Core Banking System can be fulfilled with current technical capacity of team but is very labor intensive.
  - Primary work here is data entry as well as training of local branches in basic use of computers
- Barriers do include lack of technical capacity.
  - Trainings in both use and customization of Oracle and OMNI systems would be helpful
  - Should be noted that OCSCCO does have a budget for these things and pays external contractors. For example, an Indian firm is paid \$35,000+ per year for maintenance and implementation of certain trainings.
- Lack of sustainable resources in-country also an issue

## **2. Achievement of the assignment objectives**

### Objectives 2 and 4

- 2) Support the operation of core banking system.
  - 4) Develop guidelines for effective operation of the system
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- Aim is to achieve these objectives long-term because of labor insensitivity and “high touch” nature of these objectives.
  - Recommendations to achieve these on next slide.

## 3. Recommendations to the host with regards to the assignment.



1. Identify low-cost training resources for programming languages such as Java, C#, and .NET framework (picture on left).
2. Establish contact with experts for Microsoft Server, Oracle, and OMNI system (biggest need) for ongoing assistance as contractor or voluntary help via the web.
3. Consider building training program with US company CSR initiatives or with nonprofit grant funding for MS Server, Oracle, OMNI.
4. Consider priority grant programs for IT security, particularly UTM security, of which there may be funding. This is a potentially significant issue for company.
5. A big push is needed, perhaps with the help of an NGO or Peace Corps-type organization, to train branches in basic computer use.



## 4. Anticipated Impact

- 2 greatest short-term impacts from the week were
  - Connecting programming team to available resources, forums, and code bases
  - Helping leadership to identify and assess issues within teams. Admittedly, most were preexisting.
- Long-term impacts
  - Opportunity to significantly reduce technology gap by connecting OCSSCO to American individuals, online resources, companies, and nonprofits that do assist with these issues and technologies.
  - Significantly reduce risk of data compromise and theft by improving IT security.

## 5. Recommended future volunteer Assistance

- It may be unrealistic to identify a volunteer that could directly and substantively impact IT issues on one trip.
  - For example, Indian company currently working with IT team has 3 team members here for 3 months.
- If sending another volunteer, I recommend an experienced programmer or database administrator on a trip of 2 or more months with extensive experience in one of the following platforms and technologies:
  - Oracle Banking Systems and Implementation
  - Oracle Data Guard
  - IT Security
  - OMNI Banking System
  - Microsoft Visual Studio
  - Java, C#, .NET framework

# Action plan for host recommendations

| Recommendation   | Specific Action   | Responsible person                        | By when             |
|--|---|---|---------------------|
| 1. Identify free and low-cost online resources   | Via Stackoverflow and MOOCs, identify specific training programs, their costs, efficacy   | Volunteer/Programming Team                | April 2017          |
| 2. Establish contact with individuals online that can answer questions on an ongoing basis (normal in this field). | Use online communities such as Github and personal connections (of volunteer) to establish ongoing communication.<br>Ask succinct questions and provide cultural exchange benefit                                       | ProgrammingTeam, Database Administrators, | June 2017           |
| 3. Acquire grant funding or project support from nonprofits and companies  | <ul style="list-style-type: none"> <li>Identify organizations with relevant CSR and grant program</li> <li>Establish contact with relevant stakeholders</li> <li>Apply for opportunities</li> </ul>                     | Volunteer, IT Director                    | End of Year 2017    |
| 4. Work with nonprofits based in Ethiopia to assist with local training of branches                                | Work with organizations like CRS to identify local nonprofits and programs here in Ethiopia   | IT Director                               | As soon as possible |
| 5. Seek funding internally externally for IT security issues   | <ul style="list-style-type: none"> <li>Identify organizations with relevant organizations, particularly US Government</li> <li>Establish contact with relevant stakeholders</li> <li>Apply for opportunities</li> </ul> | Volunteer                                 | End of Year 2017    |

## 6. Recommendations to other non-host stakeholders

- Non-host stakeholders, namely Indian, Chinese, and Kenyan contractors are well-positioned to capitalize on host needs and are already doing so for OCSSCO and numerous other banks and MFIs.
- As markets for such services develop, it will be critical to note how new entrants provide more competitive, quality services, particularly those who are willing to be based in Ethiopia long-term.



## **7. How can CRS improve future volunteer experience**

- Overall excellent experience! Support was great from the team on a unique assignment.
- Thank you to Biruk, Meseret, Lidia and the rest of the CRS F2F team!

***Thank You!***

