

## Grameen Head Office Visit – Day 1

April 22, 2013 – Day 1

**Notes from: Arun Kumar**

### Arun's Background

- Engineering, worked at InfoSys
- MBA joined Barclays bank in retail for 3 years (Barclays started 2006 in India)
- Came across book “How to Create a World without Poverty” concept of social business Professor Yunis
- SKS largest banker finance in India, they went public, generating a lot of attention in media, they got in touch with him, first time thought about microfinance
- CEO (Suresh) is also from Barclays (knew him there)
- 2 ½ years at Grameen
- previous technology guy left about a year ago, so Arun took over some of this
- Grameen is one of the few Microfinance orgs that have adopted technology
- Want to move on to slightly more efficient ways to work, technology can definitely support that

### Grameen Organization

- Grameen started in 1999 as a trust (NGO)
- First center formed a few kilometers from here
- 2007 Became a NBFC – non banking financial company
  - Allowed to make loans, but not allowed to provide savings
  - Mifos implemented
  - Centralized database – very new at this time
  - Mifos did not provide accounting at this time
- Grameen Foundation – alleviating poverty
  - Grameen Koota – MFI
- Present in one state – Karnataka –
  - today 80%
  - 110 branches
- 2008 – added Maharashtra –
  - today 15-16%
  - 40 branches
- 2009 – Tamil Nadu –
  - today 3-4%
  - 5 branches
- Very strong regional player
- Board of Directors (chairperson & founder Vinatha Reddy started in 1999)
  - Managing director Suresh Krishna (2000)
  - CEO Udaya Kumar (reports to Suresh)
    - Operations of each of the 3 states (and branches)

- Head office functions (aside from State head, very flat)
  - IT (also big users of Mifos)
    - Help Desk
  - HR
  - Analytics – meeting today (Hari)
  - Finance and Accounts
  - Product Operations – meeting today (Kishore)
    - Admin
    - Training
    - New product implementation
  - State head (regions report to this person)
- Branch structure (90% of organization, very heirarchical)
  - (merged Tamil Nadu with Karnataka)
  - split into 5 regions (3 in Karnataka, 2 in Maharashtra)
    - each region has a:
      - regional manager
        - 4-5 area managers
          - 6-8 branches that they handle (biggest users of Mifos)
            - 6-8 staff at each branch

Mifos doesn't do accounting, so they use another application.  
Finance and Accounting should be big user of Mifos, but they aren't

Applications Grameen uses:

- Mifos – portfolio management
  - Advantage is Centralized database
- Microfin – branch accounting software
  - Access database
    - Decentralized DB
    - Security issues associated with this
    - Installed on each desktop at branch
    - Put all expense entries into DB
    - Ideally all transactions in Microfin match with Mifos transactions
    - Enter everything in Mifos first, then have to enter everything in Microfin, upload the file
    - Simple script that consolidates all the data across all the branches
    - This throws out the input for Tally
    - Simple desktop branch accounting software
    - Just for each branch
- Tally – HO accountings
  - Don't user Tally at branch office because licenses are expensive
  - All financial statements come from Tally

- Financial reporting comes from Tally
- Jasper – Reporting
  - Reporting server, reporting engine
  - Takes data from Mifos and provides reports
  - Portfolio reporting comes from Jasper
- Outside of this a bunch of applications that we manage
  - **Sanction Portal** (kind of like a preapproval letter)
    - **Mifos defined based on our process 6 years back**
    - **If I need to make changes it's a fairly big change (purpose for Mifos X)**
    - **With loan approval, no way to make sure that Sanction letter is given**
    - **Regulations require sanction letter, tells customer terms and conditions of loan**
    - **Helps me plan loan disbursement better**
    - **Much higher chance that loan is disbursed after sanction letter is given**
  - A few other applications that are like this, branch may have to log into, not always on a daily basis, but these features are not within Mifos
- Process:
  - Express interest in loan
  - Credit check
  - Approval on system
  - Communication has to happen with client
    - Point at which a sanction letter is given to client
      - These are the terms and conditions, but these might be conditional on you providing these documents
      - Might have applied for 20,000 R loan, but what is approved is 15,000
  - Typically a week delay now because of sanction letter
    - We deal with this with Sanction portal (makes it faster)
    - Mifos does not provision for if sanction letter is given

#### Arun's goals

- Don't want to make too many significant changes so that the learning curve is too great for the users
- Understand what other applications they are using
- Need new features in Mifos
  - Accounting – currently has one full-time person manually entering data in Mifos and Microfin and manually checking – want to avoid this
  - Sanctions letter availability in Mifos –
    - Want this available, but configured by us
  - In current Mifos, structure is hardcoded, want to be able to configure
  - Would like some flexibility, not so much configured right up front

- These guys are still using 1.6
  - Some configurability in 2.4 and 2.6
  - Why are these guys still on 1.6?
  - Didn't upgrade because of performance issues
  - Going to upgrade May 1<sup>st</sup>, upgrading first to 2.1
  - Upgrade from 1.4 to 2.x is the hard part because of the DB structure
  - Will upgrade to latest after that
  - 36 hours to complete the update, migrating all the scripts and DBs, if takes too long, cannot do it because it spills into business day
  - start on Saturday afternoon, must be done by Mon afternoon
  - Monday is essentially a non-business day, no center meetings
  - Has to happen over weekend, because we cannot have downtime
  - Big question has been to decide whether to continue with Mifos
  - Has taken Ed and those guys a while to get everything is streamlined, for last some time have been undecided
- Why use Mifos?
  - Did try OMNI Enterprise – Indian core banking software, developed by IntraSoft, used by some MFIs
    - Does not have the group structure, not very robust, more individual loans
    - They have ironed out some of these kinks, not pretty much ready
    - Have to pay for licenses
    - Need specific, wired network access (desktop based)
  - Prefer Mifos because it's less expensive, don't have to pay for licenses
  - People are used to it
  - If we can get the support we need, and they can add features to Mifos X
  - Big advantage of Mifos is it is web-based
  - Conventional banking, you won't find web-based, security reasons
  - Prefers open platform, web-based
  - If we ever wanted to convert to a bank, security protocols would have to be enhanced on Mifos.
- Savings vs loans
  - Loans are your money that they have to give back
  - Savings their money is with you, so what happens if bank collapses? Need to be able to give it back to people
  - Not so easy to become a bank in India, very few banking licenses
    - Minimum capital to become a bank
    - Only 1/3 of what we need to be
  - From customer standpoint – yes they want loans

- From institutional standpoint – gives you more flexibility, can keep customer engaged
  - Can get money more cheaply
  - Today in India, interest is 3-5% or so
  - Loan from regular bank – car loan 10%, home 10%
  - Unsecure lending can be as high as 15-16%
  - Cost of funds today – get money at 14%
    - In turn we lend around 24-26%
  - Much bigger risks when become a bank
- Technology should not become an impediment
  - Has to be difficult to commit fraud
  - Connectivity in rural areas are still a problem
  - Would like to use mobile, but people aren't used to

### **Center meetings – fixed time (Arun and Kishore)**

- 6-10:30am before people go to work, take 1 hour gap
- by 12:30 – 1, they will update the systems
- loan disbursements happen at branch
- 12:00 to 3:00 disbursements at branch
- temple, somebody's house, school
- Grameen – always weekly meetings
- Monday is non-business working day
  - For branch to take care of necessary work for week
- Meetings meet Tuesday – Saturday, meets particular time, particular place
- If one LO leaves, they will bring new LO to each meeting to introduce
- 5-6 meetings per day per loan officer
- each meeting 30-45 minutes depending on size of group
- every one hour there is a meeting
- physical cash disbursement, loan applications, sanction letters
- come to branch, tally cash, enter into system
- 1<sup>st</sup> week apply for loan
- 2<sup>nd</sup> week sanction letter is given
- 3<sup>rd</sup> week can collect the disbursement
- LO goes into field with no cash, collects money
- If he collects less than disbursements in afternoon, needs to get remainder from bank
- If he collects more than disbursements, he needs to deposit in bank
- Bank in each location, they are not a clearing house, can transfer money through a NBFC
- Bank branch is different from Grameen bank

### **Kishore – Product Operations, new products**

- Only software we use for Mifos
- Does not have a built-in accounting system

- Both don't talk to each other
- All loans are brought into Mifos
- All staff are using Mifos it's very simple
- Looking at developing Mifos X
- A lot of technical discussions
  - Are integrating a lot of accounting system into that
  - Maker-checker concept
  - Security issues
    - Can open a lot of tabs
    - Multiple windows with the same login
    - Multiple window concept should not be made available
    - For every login, one window
      - 2 systems in a branch, can use the same login, each can open multiple windows
      - issue with loan disbursement?
    - Using same login on 2 systems – don't actually know who is doing transaction (can't both be same person working on it), so should not allow this, another person should not be able to use my login on another system, but because it is my ID, I am responsible, but it could be fraudulent
    - Multiple windows on same system – 6 disbursements to be done, open 6 windows, amounts, frequency, etc could be different, it would be easy to make mistakes and mix and match. Should do one at a time to avoid this mistake (user mistakes, security)
- Mifos doesn't support Sanctions portal, too many things that a user has to use
- Given technical requirements to integrate as much into Mifos as possible
- UI in Mifos X should be similar to what is there
- Should be simple enough as how we are doing it now
- These guys are not well educated, their understanding is a bit low
- Moment they see a different screen, different colors, get into mode that okay this is difficult
- Accounting, there is a tab just say accounting
- System should be able to pass entries on its own into accounting system
- Want all accounting information in Mifos
  - No balance sheet, no GL, just a loan system, not a core banking system
  - Accounting practices are integrated into 2.6
- Consolidation is time-consuming
- Upgrade to 2.1 first, then upgrade to 2.6

#### Mifos training

- Dedicated training team in each region
- Classroom training
  - On a specific module
  - Initially – 60-70% of knowledge

- 2 days to train initially
- Refresher training
  - 2 month period, accounting is also a part of it

Admin – personnel, stock stationary supply, etc.

#### New products

- process reengineering of existing products
  - better delivery and better efficiency
- developing new products
- creating loan products for these types of applications
  - Clean Energy, solar lights, power is a big issue in India
  - Providing centers with solar engery
  - Sewing machines
  - Clean water projects, water purifiers
  - Transportaion, rural housing projects
- Solar light project – how to determine product?
  - Want one lantern, or whole house covered by solar lights?
  - What is cost of it, how much time needed to close?
  - Consumption based tools, these products will not help them generate income, too much might get into credit debt
  - Mifos is able to handle different industry and different frequency
  - In a batched disbursement
    - Say housing, want to construct a house
    - Might be several loans over a period of time, disburse loan several times
    - Mifos doesn't have ability to do multiple loans over period of time for single project
    - May want to be able to have variable period and variable number of loans, or can have a fixed period, fixed number of loans
    - We look at progress of project
    - Tranch disbursement – already working on this
  - From user perspective, screen should be able to show the loan officer if there is anything that needs to be taken care of before then next tranch.
- Interface wise – should be able to give the information in total on the screens
  - 3<sup>rd</sup> tranch – should show for the 1<sup>st</sup> and 2<sup>nd</sup>, how much was disbursed, before 3<sup>rd</sup>, what needs to be done?
  - Operationally it becomes easier, don't need to go to more than one screen to see.
- LO Dashboard screen
  - Summary of days activity
    - Total of loans to be recovered
    - Total amount of loans

- How many disbursements are expected today?
  - We have 99.9% recovery, so showing the ones doing poorly isn't a very big list, not important to see that
  - Followups are happening all the time, so may not need this
  - Bulletin board – broadcast
    - Political riots have started in a particular place
    - Please take care of this – 1, 2, 3
    - Currently do this through email and it takes time
  - Today's collections
  - Today's plan
  - Bulletin board
- Managers
  - Same kind of information
  - 5-6 center managers
  - data entry operator – only person to enter data
  - branch manager – verifies it
  - center managers take turns doing the data entry, no designated data entry operator
  - common maker login – data entry operator
  - checker login – branch manager
  - performance of loan officers
    - do not link incentives to loan application
    - incentives are linked to number of members
    - process idance – followed the process and guidelines
    - never incentivize on quantity of loans – can get some bad loans in the system
  - annual basis – get incentive for rate of recovery
  - how many loans are disbursed?
  - Plan center meetings, every week they know what collections have to get, if this week the loan is applied, next week sanction letter, next week it is disbursed (4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> week customer has opportunity to take loan) if they don't it get's cancelled.
  - Mifos can automatically create a list of collections
  - 100% group attendance has to be there for loan disbursement
  - branches mark the date of issuance of sanctions letter, can say what is probable date for disbursement
- data entry operator
  - number of collections
  - number of loans
  - broadcast messages
- Manager – additionally performance
  - Performance of lo
  - Performance of branch
    - New circulars, New office orders



- Policy changes, elections coming, we stop disbursement for a week because it is against election code – give a summary of this information
- Don't do center meetings during political elections because it is too easy for the candidates to come to center meetings to campaign (their rule)

### **Praveen – Mifos demo**

- Using 1.6.1
- Different logins for different roles
- Branches have 2 logins
  - Branch manager
  - Data entry login
- Logging in as Super User to show all features
- Will show customization they have done
- DC – Bangalore – production level
- DR – Mumbai - replication
- Staging server in corp office – replication also, used for Jasper
- Do some load balancing of these
- Own service hosted on IBM servers
- Use mostly customized reports, don't use any default reports
- Using BERT, not Pentaho, 2.1.6 supports both
  - Different types of reports
  - BERT supports preview format
  - Pentaho can generate from XL data
- Admin level
  - Roles
    - Guest – can view pages, but cannot see admin stuff, cannot see products, can see loans, clients, surveys, but only view, only limited reports
    - Branch Manager
    - Data Entry Operator
    - Regional Manager
    - Area Manager
    - Regional Offices – support to branches, 50 branches fall under one region, certain report access to help them find out why there are mismatches, draw report to help branches find mismatches
    - Head office – support team, some kind of troubleshooting, mistakes can be fixed, if cancelled loan, can bring back, branches might preclose a loan with same name, need to be reverted back to preclose state
      - IT officer
      - Mifos assist

- Pension product – since Mifos doesn't support, added some workaround to use existing savings product, created roles
  - NPS – national pension scheme
    - NPS-maker role
    - NPS-checker role

Come back to customization

Superuser – Praveen and Arun – IT officer

- Can create new branch
- New product designed by operations
- Any modification
- Define new role

Mifos Assist

- Creation of new logins,
- creation of new staff,
- assigning roles to staff under them (regional officer, area manager, etc)

Data entry operator logs in

- see only branch under them, cannot see neighbor branch
- branch highest level, area, regional, state, corporate (hierarchy)
- can only see information for level under them

Branch manager logs in

- once logged into a particular branch, can only see select a loan officer (not select a branch)
- field officer is loan officer
- branch manager, data entry staff is non-loan officer
- group/centers only available to loan officers
- non-loan officers are main login users
- loan officers do not have login
- share screenshot of branch manager because it shows the loan officer info (Praveen), login screen, home page
- select a loan officer, list of centers appear (could be up to 30-40 centers/kendras)
- home page for each Kendra – how many members, how many groups,
- Grameen model – center formation where group of people meet, one center can have more than one group, up to 5 groups, maybe 10 members in each group
- Center is name given to a locality where people meet up
- Meetings recur every week Wednesday
- There is a leader that rotates throughout the members
- One is group leader for all the groups
- Time for meeting is given on home page
- Distance from Kendra to branch office

- Group names can be Group1, Group2, Group3, G1, G2, G3, Kendra name attached to 1, 2, 3, etc
- Open group home page
  - Surveys for groups (default PPI comes with Mifos installation – Poverty Progress out of Index)
  - Grameen has their own surveys, don't use the default one
  - Kendra Visit Survey
    - About 20 questions
    - If meeting happens on time
    - Disciplinary things taking place properly
  - Inherits center information – groups
  - Group home page
    - List of members
  - Member page
    - Most loans are given for 1 year – to pay weekly
    - Loan detail pages we want to keep the same

#### Loan application process

- Person applies for loan at one meeting
- Entered into system
- Send application to credit bureau (partial application)
- Credit bureau has consolidated information from all MFIs
- Check overlap report – as per regulations, the customer should not borrow from more than 2 MFIs. Tells us if customer has taken a loan from another MFI
  - Customer should not be loaded more than 50,000 R portfolio
  - Cannot loan if over that or if 2 MFIs
  - Won't lend to customer if they were rejected from another MFI, or default at another MFI
  - If any of these are true, Application will automatically go to cancellation status
  - If all these conditions are false, then we push to pending approval state (when system does it, user is given as Mifos)
    - Credit bureau issues a report, shows in system
- Approvals set to pending approval, then it's taken up by the loan committee
  - Looks into loan details, see if last loan was paid properly, whether her behavior in field is proper, some of this information does not reflect in credit report, some discussion between loan officer and loan committee about her nature
  - They decide to give or pass on loan
  - When loan is approved from loan committee, it goes to Application Approved
  - Fees – insurance, etc based on loan product definition, appears in
  -
- These processes are fixed in Mifos – means I cannot have one more layer of approval,
  - We don't capture the sanctioning because it isn't in Mifos

- Doesn't have a stage called Loan Sanctioned
- Should be definable – can be set by MFI
- Mifos has only one approval level, should be definable
- Then physical disbursal happens
  - Loan status moved from Application Approval to Active in Good State
  - Loan can have a moratorium on principal (only pay interest for a period of time)
  - LUC – loan utilization check – once a loan is given, the loan randomly goes and checks utilization – (defined period – after 3 wks, 3 mo, 6 mo, 9 mo, etc) whether the amount given has been used for the intended purpose. If for cow or goat, go to check and see if the cow or goat exists or not.
  - System does not show the next LUC, this is tracked manually. Once it is done, they will update it in the system
- Mifos tracks all change history – all changes in state, what is value before change, value after change, whose login the change has been made
  - But there are some limitation – some fields don't have edit options, some fields may require changes, should be configurable, but should be allowed
  - For example – date of birth cannot be edited. There is a possibility that it was entered wrong and needs to be edited. Currently not even the admin can edit it
  - Also Govt. ID – might have thought these things would never change, but there is a chance of error in entry
  - We have created an in-house portal – MTS – Mifos TroubleShooting portal – whatever blocks are there that require correction, we allow to change DB, we track of changes, but it is outside Mifos. So we can't see these logs in Mifos.
  - Currently, once we allow to change DOB or ID, the user can change almost anything, no control over field to permit or not permit
    - Need to be able to change specific information, but not everything
  - There is an edit option in Mifos, but if I give it for DOB and ID, then it give editing for everything and we want to be more specific.

Hari – MIS and Finance – reports directly to CEO

**Parakshith – MIS and Finance**

How many users across the world of Mifos?

MIS inspect the reports and use them

- For reporting purpose – operational data - Mifos, financial data – Microfin, Tally, HR data – salary info?
- All HR data is mainly on Excel.

His role – more of analysis, use this data to come out with information

- Branchwise profitability

- Different segmentation of borrower, different area and region, see the progress in regions
- Number of centers per KM – loan officer/ Kendra manager
- Number of parameters we keep on tracking

#### Mifos

- Challenge of coallating the information
- Financial info comes from Microfin
- HR comes from HR Excel, not integrated with Mifos
  -
- Need to coalate them, then do analysis
- There are chances of error
- If all three were combined it would be of great help
- In Mifos, there are is limited number of option for loan repayment frequency – weekly, biweekly, or 4-weekly, cannot be montly or 6-months, everything is multiple of weeks, Need more flexibility
- In terms of moratorium period – fixed moratorium, right now we give interest only moratorium, if we can change it as per requirement of loan producgt. Mifos only allows interest only moratorium.
- What else would you want to do?
  - Shows only the latest portfolio outstanding
  - If we want to see what is outstanding from an early date, cannot see that currently – many times we want to use this for reporting purpose
  - We currently do a dump of data and then we can pull up data from previous month or year, but if this were available in Mifos it would be great
- Reporting capability of Mifos – giving summary reports right now is very limited
  - We use Jasper server and create the reports
  - If we can get live reports in Mifos
    - Want to see how areas are performing, customizable reports
- Would like some validation on fields – no validation for date, can choose any date, but may give the wrong date (same as discussed with Vishwas)
- Mandatory option should be under admin control
- What don't you want changed?
  - Structure is good
  - Gives us live information, very easy to update by field officers
  - Easily manageable, the branch people can access the info at very low bandwidth
    - If internet speed is very slow, they can still access the information
    - Rural areas the internet speed is not that great
  - Because fo limited repayment capability, we only offer limited products, but would be nice if it were more flexible
  - Now we don't have flexibility to change meeting from one day to another
    - Once a loan is created, repayment is tied to dates

- Loan dates show for Wed, even if meeting date is changed to Saturday
  - Cannot change day of meeting unless Kendra has no portfolio
  - We have to do this outside Mifos to do this
  - Many borrowers want to change meeting days, but we cannot do this
- Financial side –
  - Capturing of financial data from the branches itself
  - Separate system of Microfin
  - What is income/expenses profit/loss of each branch
    - Right now this is not possible
- WE have to move loans from one bank to another, but there is no way to track when moved from one bank to another
  - No UI to hypothecate loans to particular funders
  - Should be able to filter based on the product or updates
- We do hypothecation
  - We give funders a set of loans and we mark those loans in the DB
  - Each loan is marked with a funder, then we have to show 1M loans for this portfolio
  - When auditor comes, we have to show which loans were funded from where
  - Have to show where the money came from and where it goes
  - All this activities is tracked at the backend, there is no UI for this
  - There will be some deals which take place, these should have a separate tracking of MIS
  - Loan securitization –
    - If it doesn't – loan balance is 75 lac, but is only 60lac, we have to add 15 lac accounts to them (?)
- Mifos DB is limited to 10M LAC, 10 LAC customers, 1M customers, our growth will be more than this, targeting 20LAC customers, so DB will not handle this
- Complete recoveries made in financial year, takes more time to generate reports because lack of indexing being done in present Mifos, takes too much time for so many customers for reporting
- For optimal outreach, this should not be a challenge
- Each transaction that happened in the financial year
- DB needs to be more optimized
- Mifos process flow is not there – there are certain set of checks – whether credit bureau has been done, check, data entry doesn't enter the PPI information – would like to have a checklist of things that must be done, only after that certain steps should follow
- LUC does not have any alert, has to be done manually, it does not force them

Targets for loan officers – are they meeting targets

- Each Kendra manager/each loan officer against targets
- Should be customizable, but be able to see in UI

Plans to do more mobile technology in fields

- Integrate front end device with Mifos
- Scanner can capture information and puts into database
- Simple hand-held device after each Kendra can send an SMS message to centralized DB

800-1000 loans per Kendra manager/loan officer

500 clients, 1-2 loans per person

5-6 kendras/day/loan officer

Average amount of loan: 6000-7000

Typically get more money over time, one main group loan, there are supplemental loans, emergency

10 loan products

Mifos –

- Integration with finance
- Validation for data in UI (cannot enter wrong date, for example)
- Checklist of items that need to be done in a particular order in process