Grameen Head Office – Day 3
Wed, April 24, 2013

Manager of IT Helpdesk - Prasath
JTrac – Java Trac
Uses IT support Desk
RO-IT TaskList (must fix within a week or so)
- Issues with Mifos - things that are configured a certain way, but later need to be changed, done at IT Helpdesk level

(Very similar to Helpzilla)

IT SupportDesk (fix within SLA time period?)
- Complaints
- Issues like need to create new Kendra, printer not working, something is corrupt
- 1000s – hardware related, 2000s – software related, 3000s data entry related issues

Top HelpDesk Issues
- Create New Kendra   - 128
- Support to resolve BCC issues – bulk entered wrongly – 122
- KYC details entered wrongly – 70
- Loan application status change – 55
- Password change request – 49

- Client transfer between groups – 45
- Miscellaneous – 32
- Kendra drop out - 31

Approvals – above 15,000 Rupees has to be approved high level, below branch manager can approve

Mifos issue: Some products need to be approved centrally
- Want different roles to be able to approve some types of loans but not all (Mifos allows only for a role to approve all loans or not)
- Try to approve loans in bulk, all loan types will appear, and all can be approved, but want a role to have access to only certain loans
- Helpdesk team gets troubled to reset loans that are accidentally approved by someone that does not have permission to do so

Mifos issue: No option in Mifos to merge Kendras for efficiency. One village may have one Kendra meeting on Wed. but a different Kendra in same village meets on Sat. Want to be able to merge them on a single day, so that the same LO can visit more easily. This is not easily facilitated in Mifos, so that the IT helpdesk has to reset this for them.

Mifos issue: Same product can be entered more than once for the same customer – we don't want this to happen. For the same customer, for the same loan type, have to do a credit check.
- One person one type of loan at a time – one emergency loan, one festival loan (up to 2000 R for celebration purpose, want to go to temple), one cookstove loan, one regular loan. Currently Mifos allows for the entry of more than one for each type, doesn't control for this. Don't have a control to restrict the products for a particular region or area. Currently piloting a housing loan, but want to do this only for 50 branches, Mifos doesn't allow us to restrict to a set of branches. So often a LO will pick up this loan accidentally, so this has to be fixed at the IT helpdesk level.
- (Deanna comment) sounds like we really need a lot more ability to limit choices for a given field, basically everywhere possible.

Mifos issue: Want loan approval permission per size – branch manager should only be able to approve up to 15,000 R, area manager up to 20,000 R, regional manager up to 25,000 R. Max outstanding portfolio per person is 35,000 R.
- Want Validation done during loan application to restrict them, system should alert them that total amount will exceed 35,000 and this is not permitted.
- Comes to IT helpdesk (audit team) as an issue, and then it has to be fixed.

Mifos issue: KYC ID and DOB should not be editable, this information has been shared with an insurer, so it should not be able to change after a loan has been insured. Some control given in UI to not allow them to change, but then this

disallows editing of all personal info (?) Current workaround – permanently blocked editing of any basic information for client. Through MTS UI can client data be changed after a loan approved.
- If no loan exists for a particular client at the moment (ie no outstanding insurance), then this info can be edited.
- Want to block KYC, DOB, and Name, but should be able to edit address, spouse status, etc. Non-ID information.

Mifos issue: One Kendra manager can handle more 30-40 Kendra in a branch. If KM gets transferred from one branch to another, all his Kendra need to be transferred to some other person – either a new person, or distributed between other Kendra managers. This has to be done manually now. Have to go to each Kendra individually and change the KM name. Need an option to do this in bulk. Control to fix this is now outside Mifos. This task comes to IT helpdesk, but want the branch manager to be able to handle this with Mifos. (or area manager)
- We need to know if the transfer has happened. Can delegate this task to HR dept. They are the ones who know about the transfer. If a LO disappears, his user controls and passwords must be changed. Need to be able to do this quickly if someone quits. Need to make this login inactive. Needs to be done within Mifos so that branch manager can handle this.

Mifos Trouble Shooter – this is a Grameen app
- Kendra Transfer
- Member transfer
- Staff transfer

- Loan purpose change – after it's disbursed

Mifos issue: There isn't an edit option to change Kendra name. (needed if Kendra's merge)

Some data is gotten from the data warehouse and not from Mifos, so they've written scripts to present this data.

In a month about 120 new Kendras added.   Inactivated Kendras about 20-30/month – but this is not regular. Last year 1300 new Kendras, dropouts about 600.

Creating new Kendra is a common task.

Mifos issue: Product-wise and group-wise activity restrictions(?) Approval controls also specific to product (also any control – should be given to specific products)

What info should appear for different user dashboards?

IT Dashboard
- Disbursement pending (on that day)
- Collections per day – graph of information
- What is percentage of data entry done at branches
    - If branch manager and data entry person are absent, perhaps entry is neglected – if this doesn't happen by end of day, can default (all collections for day are now in arrears)
    - IT people want to monitor how much of the bulk entry has been done at what time of day, want to see that certain % is done by certain time, such as 40% by 1:00pm. By 3:00 at least 70%, by 5:00 at least 90%.
- They have an external tool they use for graphing this. Current graphs (pie chart) – attendance, disbursement, LUC collections, overdue.
    - run script at 2:00 gets updated every 2 hours, If this hasn't' started by 4pm, IT calls to the branch to find out why they haven't started. Are there any IT issues?
- Also includes the following table

Table
    Branches – Kendras – Clients –Collections – Overdue – Disbursement
Target
Completed

Mifos issue: Need a Loan sanctions stage to communicate with finance team. How much money has been communicated to client. Will help finance dept. get the money to the branches. Sanctions portal (that they created) – branches can update yes or no, for which the loan sanction has been done. Finance team will supply the loan amount to the branches. This needs to be monitored in the case where disbursals will be more than collections for a given day.

Branch manager Dashboard
- Staff performance
- How many Kendra each staff handles
- What is portfolio LO is handling
- His Kendras attendance ratio, dropout ratio
- Portfolio at Risk (PAR)
- Announcements
- Average portfolio/Kendra
- Average members per Kendra
- Number of customers

Data Entry Dashboard
- (this task is done by the LO, but not every LO does their own. When back at the branch office, one LO acts as cashier, and one enters data for them all.

This task rotates between LOs. So we can't restrict a LO to only data entry for their clients, but to the whole branch)
- Percentage of work that has been done for the day
    - % of collections
    - % of disbursements
        - Perhaps this data can be shown as a progress bar?
- If he can monitor this, he will have more motivation to work fast
- Knows how much data has been entered only by referring to reports, but reports only show summary, does not say which Kendra is not done, shows only x amount is still outstanding

Loan Officer Dashboard
- Target vs actual for the day
- Target vs actual for total financial year
- For existing customer, how many products has he offered to them?
    - Cookstove, water sanitation, NPS – these loans will have some targets, have to get about 50 loans per month (targets are per month)
    - Yearly target is given, monitored per month

Target is set based on their own capability, tell how many loan portfolio I'm going to manage, based on this, whole Grameen target will be set

Mifos issue: Mifos does not track targets (it is overwriting) – if LO officer's portfolio is transferred to another LO, then the tracking for that person's targets is overwritten (starts over for the new LO) – such as data like attendance, etc. should be there as history, but tracking should start over for new LO. Old tracking should not be lost because this info is used for incentives.
- Incentives for member handling, member formation
- If history is tracked accurately (one LO for certain period, then another LO takes over, need to distribute incentives correctly)
    - Deanna's note: kind of like restaurants pooling tips – at end of day, tips have to be distributed to employees based on an algorithm determining how much goes to each person

Area Manager Dashboard
- (About 10 branches per area)
- Dashboard
    - Branchwise average staff
    - Branchwise portfolio
    - Branchwise number of customer
- (Similar to branch data entry metrics, but branchwise)
- Which branch is lower, which is performing good
- Staffwise information for all staff under him
    - Staff performance – same parameters

Regional Manager Dashboard
(Similar to area manager, but per region)
- Per region up to 50 branches

State Head Dashboard
- All regions in state (2-3 regions in one state)

IT staff Dashboard
- Charts that show how branches are doing per day for data entry
  - Helps to monitor branches proactively
  - For entire day, the entire dues of the date will go to default (arrears) if the branch does not complete the collection entry sheet completely for the day
  - Duty is to ensure that all branches will complete their days work in that day
  - IT Gets to know which branches need more follow-up
    - Perhaps these branches should bubble to top of list, knowing that they often need more checking than other branches
    - Show branches that need help at top, branches that are doing well at bottom, sorted by data entry percentage – currently they use color indication: red means no work has been done, green – work is gone, yellow – in progress,
  - This shows collections information in terms of percentage (but not disbursements(?) Only for recovery, not for disbursements (because these are more variable). Branch would have set x amount of loan MUST be disbursed this week, if only 30% is disbursed, it means there is a chance they did a disbursement but did not enter in Mifos. Cannot be less than 50% - it means something is wrong. In this case, they will call and confirm.

For branches: LO in morning for Kendra meetings, share tasks of data entry and cashier back at branch office.

CEO – Uditya
Get CEOs perspective on what we can improve in Mifos

- A lot of manual work – applications, documents, announcements, can actually automate and integrate back to systems
- Transactions automation
- Create videos, or other methods of communicating
- Can't tell where LO went, they are carrying our money, want to track if they are on time, where they are
  - Creating these interventions
- Once loan application is created, rest should be automatic
- Mifos is not integrated with Microfin

- Delayed input in transactions, then funding loan is delayed, no way to tell financial status at end of day (not part of Mifos)
  - Have to enter data both in Mifos and Microfin
- Way of transacting
  - No logical access controls
  - A lot of limitation in controls
  - Transaction maker – checker
  - Transactions happen, but we don't have an audit trail
  - Not appropriate access controls
  - Loan modification more control
- Limitations of the product itself
  - Mifos currently based on group-lending model
  - Non-group lending is limited
  - Group is linked to weekly, cannot create an individual per month
- Disburse money in tranches
  - This is not easy/possible (?)
- Ability to integrate more front-end systems
  - Devices like tablets, linking back to system
  - LO takes tablet to field – can do online transaction, online credit check, from moment he takes application, he can do a credit check, possible to give the sanction letter on same day
    - Credit check is slightly expensive, which is why we do in bulk at head office
  - Currently takes 2 weeks from loan app to get money
    - Can actually reduce that to one week if credit check done in field
  - Paper loan application will always be necessary
  - Bulk transaction process already there
  - Would only have to do disbursement transaction (not collections) at the office
    - Collections could be done in field, save time
    - LO would have extra time to add customers
  - Use google tracking system to see what time LOs arrive at Kendra meetings and where they are

Dashboards – logins per user
- Made to order dashboard can be created
- Necessary to do collections first and then disbursements after
  - Loan needs to close before disbursement. This is because if a client has a disbursement coming (and it's timed to start when her old loan finishes), need to make sure the LO collected her final payment on her outgoing loan before he can give a distribution on a new loan.
  - This is why collections are all tallied and entered into Mifos before any distributions are made, requiring the data entry to go back and enter the collection sheet data twice each day.

- Would like to collect data about what a Kendra manager is doing so that we can see how we can help make them more efficient
- Checklist – on a daily basis, here are the things I need to do today
- Too much data coming from different sources, which isn't aggregated in one place (unless Grameen creates the aggregation, Mifos doesn't do it)
- Senior people should be able to see everything, and summaries
  - A lot of data mining
- Jasper and Pentaho does the data mining (shouldn't be able to do this in Mifos)- this is how it is currently configured
- Ultimately, objective is to have proper audit trails, logical access, transactions done by 2 people minimum (maker/checker), reduce transaction time, create more bandwidth
- Want to use for trainers, audit, senior person – branch manager, area manager visits should be able to use a tablet to monitor, transaction, audit
- Business rule definition
  - Star status – if sanitation facilities, one star, if cooking, another star – if they take these loans, get more stars
  - Deanna's note: sounds like gamefication ☺ (not just for marketing products, but also for determining PPI level – their Progress out of Poverty Index)
  - Also living conditions (PPI) – do they have access to water, stars can help decide if a certain kind of product even makes sense for a given region
  - Customer intelligence – making intelligent business decisions about what products are relevant to them
  - Some areas are very drought-prone, might need certain products
- What is the sort of profile of a customer that defaults on loan?
  - Can we use this data to help prevent default?
  - Want to do this kind of data analytics here at the head office
  - For this, information coming in has to be reliable, if data is suspect, hard to make decisions

Internal Audit – Sateesh Kolur
- Auditors visit center meetings
  - Checking with Mifos data, make sure same KM (Kendra manager which is loan officer) name is on collection sheet
  - Mifos branch progress report – check if loan is going to same members, if it's going to the member that is listed in Mifos and Microfin (or using different IDs so looks like a differentperson?)
  - Check if Kendra meeting is done property
  - Check if LUC purpose is added properly
  - In Mifos will enter loan purpose and check if that is what they've actually used the loan for
  - Branch progress report – check that staff members (LOs) are matching with what is in Mifos

- Check if Microfin and Mifos data tally with each other
- Visit Kendras regularly (not randomly)
  - Each branch, once in 2 months, will go to one or 2 center meetings each day
  - Audit team has two members –
    - Each daily attends 5 –6 Kendra meetings
    - 2-3 days visit, depends on portfolio
  - 22 auditors that do all of Grameen – covers all branches every 2 months
  - Each of these auditors have separate Mifos login

Jasper used to track – get automated reports from Mifos DB

Only look at reports, don't edit
BCC report, BPR report, Mifos Day book, Microfin, LUC status, PPI,

Mifos issue: Branch people do job daily, but they don't keep back up of previous years, only last financial year data is available, want to be able to keep track of previous years data. Microfin only allows tracking of current financial year, but need previous.

Mifos issue: (repeat) Member cannot have more than 35,000, but we can't check. Need to an alert when client tries to apply for loans over this amount.

Mifos issue: (repeat) Multiple lending of same product to same client should be prohibited. This has to be audited.

Check for auditors, when loan gets disbursed should not be more than 35,000, but has to be checked manually. Auditors cannot check all loans, so now they only do randomly. Mifos should at least alert for loans that look like they are over.

Emergency and festival loan only if there is a general loan. Currently does not stop them. Auditors cannot check all, only get random samples.

Mifos issue: Concerned that sample he picks up, finds an audit issue, it is now only tracked manually. Next time goes to ensure that issue is resolved, has to recheck. Don't have something centrally to mark a loan as audited (with issues).   Has to cross-verify himself. No rule in Mifos, even to say that this is a picked up sample. All this stuff is tracked manually. Want to be able to mark "mistaken" loans in Mifos, so that it can be tracked.

Mifos issue: Dropout customers they must do a PPI, but it might not get done. Makes a complaint that it is not done. But this is not tracked in Mifos.
- Could be part of a checklist (can't get loan approved, for example, until PPI is done, or customer can't be dropped without a PPI)

Some branches are not taking govt. ID, cannot edit govt. ID if it is wrong. KYC ID but it is appearing as something else(?)

Audit Dashboard
- Set of checklist made available as one screen in system, can update directly
    - So they can run through the steps easily, make sure they got done
        - LUC (loan utilization check) go to clients house to check if they are using for what they said
        - Branch check – visit each Kendra
- How many loan application per staff in a month?
- How many member formations they have done – how many new members per staff in a month?
- Total number productwise loan application per branch
    - Want these numbers so he can figure out what percentage they need to do (want to do say 20% samples, rather than 10 samples, samples should be percent of total so there are more samples for more loans)
- Absenteeism ratio – want to flag Kendra with more absent, or dropout
- Track kendras that say they have 100% in a month, which is very difficult, so want to be alerted to this, so they can check up on what is really happening
- Currently, Only check if they have doubts about a member

Mifos issue: Currently, can put KYC, but don't have option to choose which type of ID they are given. Want to be able to ask for a specific ID from the user, want to track with users have given which type of ID, so can know how many people have given which type of ID. Once in 3 years need to collect ID from person, and want to collect SAME ID each time, but no way to track this. If gives a different ID, want to track both. If it's the same ID, need to say it's same.

Mifos issue: Sometimes in branch DOB and detail taken is incorrect, later we come to know DOB is something else, then insurance will not be covered. Once/month they do some Excel (?) work to cross verify, they have to reimburse client for the insurance premium, so not insured. Want to avoid this – spouse age is more than 60, should not collect insurance. System will not block this. Insurance team will verify, and find this has happened, they have to reimburse the insurance policy.

Mifos issue: Phrase used for divorced or separated is "left", "late" for passed-away, should update marital status, use this appended with spouse name. System doesn't have any way to track. Marital status is not updated, so system doesn't know if insurance is applicable or not. Many mistakes from this. Need to be able to edit marital status. Option to edit customers name and add "left" and "late" to the name. Perhaps need to cross-check this with marital status? Or automatically set marital status based on the addition of "left" and "late" to the name.

Mifos issue: Mifos doesn't have stages for membership

- Target new member
- CGT – compulsory group training – learn Grameen process (this takes place for a group when it is formed. Doesn't need to be redone for a new person adding) – done by field officer
- Re-interview – similar process of GRD, but done by branch manager
- GRD – group recognization test – after 5 days of training, senior manager (maybe area manager) will go to make sure the training has been done properly, will decide if members can be activated, done by area manager
- Member activation (first meeting)
- Deanna's comment – looks like another checklist

PPI Explanation
- Progress out of Poverty Index
- Set of 10 questions
    - Each question has a set of options, options are weighted
- Scored range from 0-100
- For every customer we capture PPI
    - Captured when joining, every year it's repeated
    - Or repeated when new loan is taken
    - If client leaves, we capture this information
- Hoping to see that MFI is helping move people out of poverty
    - Hope that if client leaves it is because they no longer need MFI
- Score is automatically calculated (not editable)
    - Based on the options which are selected
- Captured on a physical form, feed the data into the system back at branch office
    - How many electric fans in home? (for example)
    - Mifos calculates score, person cannot edit (which is correct)
- Challenge – the PPI which we currently have on Mifos, was developed in 2008, last year a new scorecard has come out, and we have a new scorecard now. Some indicators are same, but some are new (like cellphone)
    - When tracking clients, we have to consider the old scorecard vs the new one
    - Have not yet changed the scorecard in Mifos, technical challenges (it is hardcoded now)
    - With new Mifos want to roll out new scorecard
    - Need both old and new data, but need to have a demarcation for which scores are from which survey
- Want to be able to look at Mifos PPI scorecard
- Very important to be able to track the poverty level of our clients
    - Would like to be able to see how many scores for each client
    - Want to be able see which score is first, second, etc. Perhaps a graph showing that shows how the PPI score has changed over time?

- **Issue**: If power goes off while entering data in a PPI score, they have to reenter the same thing, don't know if it's been entered, might have 10 PPI scores in very short amount of time, have to filter out,
    - But if the client screen could show the PPI score, then they would know that it has been entered.
    - Deanna's comment: Maybe we could show score and date on the client page? People don't remember if they entered it, and they enter it again in 1 weeks time or 1 months time, so date would indicate last time PPI was updated, perhaps reminding LO that he just recently entered so it must be recent (or can compare score on client page in Mifos to score on paper and know it has been updated)
        - If date is entered, can use this to flag the 1-year mark and alert the LO that he needs to take the PPI survey again
- **Mifos issue**: At time of loan app, if we make PPI score mandatory (now it's not, can submit app without PPI), should make it a mandatory field,
    - They may capture this information but it doesn't get entered into Mifos
    - Would like an alert if last PPI has been taken more than one year ago (even if a loan is not renewed) should redo every year.

Basic Data form – MBDF – members basic data form –
    - Need MBDF in Mifos
        - Address
        - ID
        - Name
        - Family data
        - Income levels
        - Assets
    - PPI should be a part of this (integrated)
- MBDF is updated every 2 years – not all fields should be updated, like name should stay same
    - Allow them to capture changes, track all instances so can see changes over time
    - Data should be feasible for analysis
    - A lot of data, need an archival system, but easily retrievable
    - UI should populate latest data but historical data should be easily accessible
- PPI should be taken at least once/year but also when they take a new loan
    - Not able to associate a PPI with a particular event if the PPI isn't taken each time (PPI needs to be mandatory)
    - Cannot tell what a PPI is associated with – should ask if it's for new client app, new loan, exit - need a field for this
    - Deanna's comment – should keep a list of all PPIs taken and for what reason (perhaps have a dropdown list of reasons on the PPI scorecard?)

- Retriveal and anlaysis of data, reporting is done centrally, then we publish the report everywhere, management, branch offices
  - Would like PPI to be visible easily at various levels
  - Would like to say 30% fall below national poverty line
    - Branches cannot see this information unless research sends it to them
    - Want branches to be able to see this report, create this report themselves

Dashboard
- For branch managers
  - See PPI aggregate data (how many people are within poverty level)
  - How many PPIs have happened and how many are due

National Poverty Line
Dollar 1.25/day
2 dollars/day

Mifos issue: 5 years down the line we may have a new score card, should be in a position to integrate these indicators into Mifos, (currently it's hardcoded, not flexible)
- Also poverty line we look at we should be able to change (right now its 2/day, might later be 3/day)