

MIFOS USER RESEARCH

Skype Interviews

April 3 – 12, 2013

India & Kenya Trip Report

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Purpose of Report

This document summarizes the feedback I received from 6 MFI site visits in India and Kenya as well as 5 phone interviews with MFIs in India, Lebanon, and the Philippines. I've compiled a list of top major issues (9 of them) and then a more detailed list of these issues and other, more minor ones. I've tried to capture all the issues raised during these meetings related to user interface improvements, feature requests, and bugs.

MFI Visit Summary

Including Skype interviews

MFI	Visit	Platform	Process	Transactions	Loans	Collateral	Notes
Grameen Koota, India	3 days	Mifos	Structured daily process	LO collects cash in AM, uses for loan disbursements in PM	JLG (joint liability groups) only	Group trust	Mifos specifically developed for Grameen.
Chaitanya, India	½ day	Delphix	Structured daily process	LO collects cash in AM, uses for loan disbursements	JLG only	Group trust	Looking forward to moving to Mifos when accounting is integrated
Missions of Hope, Kenya	1 day	Mifos	Very manual, lots of data entry duplication	LO handles no cash, receipt only. Disbursements by check	JLG only	Collateral fund + member guarantors	Data entry done by sys admins, very manual, high error rate
Juhudi Kilimo, Kenya	2 hrs	MFI Flex (Salesforce.com)	More automated, uses M-PESA	LO handles no cash, M-PESA all transactions.	JLG + individual	Collateral fund + member guarantors	Uses M-PESA, no cash handling, farm loans only (no urban business)
Jitegemea, Kenya	2 hrs	Mifos	Less structured	LO handles no cash,	JLG + individual	Collateral fund + member guarantors	2 separate organizations
Musoni, Kenya	2 hrs	Custom app	High automation (goal: loan approval in hours)	LO handles no cash, M-PESA for all transactions.	JLG only	Collateral fund + member guarantors	Very high-tech. Aim is totally paperless. Higher efficiency, lower cost
Adhikar, India	No	Mifos	?	?	JLG	Group trust	LOs do data entry
Al Majmoua, Lebanon	No	Mifos	?	LO collects cash	?	Group trust	Office assts. do data entry
Digamber, India	No	Mifos	?	LO collects cash, LO fraud common			
Intrasoft, Kenya	No	Mifos	N/A	N/A	N/A		ISP provider
SECDEP, Philippines	No	Mifos	?	?			Office assts. do data entry (security)

What's Working Well

After we got through with all the issues these MFI's had, it was very common for them to point out that they like the interface as it is. They find it very easy to use and very simple. Many were also quick to point out that their loan officers are often not well educated and not very computer savvy and they would prefer to keep changes to a minimum to reduce relearning time.

Having said that, I think we need to balance the obvious need for new features (such as integrated accounting and easily customizable reports) with a measured approach to UX improvements. Some things, like dashboards with better use of font size, color, graphics, and white space will be a big enough benefit that MFIs won't complain that it's so different from the current UI. But some things, like the client pages and loan pages may need just simple graphic and layout adjustments to make them more readable without changing the format or workflow.

Summary of UX Improvements

There were a handful of issues I heard over and over from users, leading me to this list of major UX design components that I think would go a long way towards improving the usability of Mifos. I put these in rough order of importance.

1. **Accounting integration** – Mifos is already working on this. Need to look at UX implications.
2. **Maker/checker** – Mifos is already working on this concept. Need to look at UX implications.
3. **Easily customizable reports** – finding any common ground on reports seemed pretty elusive. Everyone had specific kinds of reports they want and tweaks they wanted to make to existing reports. People both complained there were too many reports and not the right ones. It seems the only sensible thing to do is to allow them to create their own reports. I know this functionality exists, but not everyone is technical enough to use scripting with any skill. A good user interface for customizing reports would help – such as drag-and-drop report columns.
4. **Validated Fields** – one big area for human error is in entering incorrect data into Mifos fields. Currently we provide little validation of correct data per field. Fields need to be either limited to correct data (as in drop-down lists rather than type-in fields where applicable, or calendars with disabled dates) or to provide a notification that a field is incorrect or likely to be incorrect.
5. **Dashboards** – this concept has already begun to be implemented in Mifos 2.6, but needs to be expanded. This was validated through the interview and on-site visits in the past month. Dashboards should be per user/role (personas) and should also be customizable. While we want to provide a

good default dashboard for each role, Mifos customers are diverse enough that I think customizable dashboards is going to be a must.

6. **Security** – customers would like to have user logins restricted to certain functionality (I think we already do this?) as well as ability to specify a time period for password changes. (Currently we do not require any password changes?)
7. **Checklists** – this idea came out of discussions with several Mifos customers. They complained that it was difficult to make sure certain steps got done before other steps were taken, such as not approving a loan unless and until a credit check had been done on the client. I think we could allow the sys admin to create their own checklists, specify whether a checklist item is required or recommended, and provide notifications when the user tries to complete a step that has previous incomplete steps.
Note: in reviewing the documentation, I see that we have the concept of checklists, but it's hard for me to tell how they work. Also, note that customers don't seem to be aware of this functionality (or it doesn't work the way they want it to.)
8. **Collection Screen Improvements** – collection sheet data is generally uploaded on a daily basis for weekly (or monthly) group meetings. Need to allow for: multiple uploads of same collection sheet (Grameen uploads repayment data first, then disbursement data when it happens), ability to see uploaded collection sheet for any given day (some organizations don't upload until all bank receipts are received, could be a day or more later.) Multiple people do data entry, need to track if particular data may already have been uploaded, to avoid duplication.
9. **Change Tracking** – want the ability to view the history of a group, member, and loan officer. Particularly important: group membership changes, loan officer changes. I think some of this already exists, but perhaps not to the extent customers are expecting.
10. **Notifications** – want notifications for specific purposes, such as alert loan officer and/or branch manager when PPI is older than 1 year, alert branch manager that loan approvals are pending, etc.

I think it could be argued that, in very general terms, customers want both more flexibility and more structure to Mifos. This could be because clients are very diverse – ranging from the very rigid, structured daily processes of Grameen, to the more flexible, ad-hoc processes other organizations.

UX Details

Accounting Integration

Did not get a lot of feedback on this other than everyone wants it and I know this is a key part of Mifos X. Just some additional notes.

Accounting integration will:

- Eliminate duplication of data entry – reduce mistakes
- Eliminate need to check if Mifos and Microfin (or other accounting software) tallies
- Reduce need for so many auditors (Grameen)

Customers asked for:

- Ability to track financial data for more than just most recent fiscal year.
- More support for other banking services, like savings accounts
- Ability to track money that is not repayments or fees, such as training – in one case, members pay for training, but this is not a fee or a loan, it is income and needs to be tracked as such. (Jitegemea)
- Ability to tag a withdrawal (from collateral account) as a specific type of transaction. Because they aren't currently tagged, we can't tell if it's a mistake or legitimate withdrawal. (Jitegemea is only one that seems to do this.)
 - when customer has so much savings they can ask for partial withdrawal
 - when savings is used to offset loan balance
 - when it goes to client's account, it doesn't show what it is for – because this doesn't go through a bank, we need to be able to track and link this
 - fees pertaining to a particular action – fees associated with particular event, like loan fee, it is deducted during loan application (because it is collected ahead, so it isn't associated with a loan yet) we normally put it into the savings account as a place to put it, so need to know what it is for when it is deducted
 - need to show certain amount is “frozen” because it is being used as collateral for an active loan
- Bank reconciliation – shows all groups together in one lump sum as expense
 - Need ability to see each group separately for accounting purposes

Recommendation: None at the moment. Need to understand better how accounting will be integrated first.

Maker/checker

I did not get a lot of feedback on this, except that everyone wants it. Note, however, that as processes become more automated (as in M-PESA transactions), the need for the checker is reduced or eliminated because the data entry was done automatically, it does not need to be checked for accuracy.

Customers asked for:

- Would like to save or submit for collection sheet for approval to a checker who validates data before collection sheet data is finally submitted

Recommendation: None at the moment. Need to understand better how maker/checker will work.

Easily Customizable Reports

Currently many reports in Mifos do not work properly or provide incorrect data. Pentaho reports are better, but both Mifos and Pentaho reports are either too general or too detailed to be useful. Many people wanted fewer reports that “work on several levels”, such as same report for a different dataset for various levels such as client, loan officer, group, portfolio, branch, head office.

Reports should be customizable. Should be an easy way to select a set of items (just add or subtract columns in a spreadsheet?) from which to make any report.

One customer asked for a way to view multiple reports at one time (side by side, perhaps)

Issue noted: Pentaho – can only select individual type loans or “all”. Would like subcategories like “all loans” and “all savings” as choices as well. Also “all inactive” or “all active”.

Reports that customers use or want:

- Collections for each Loan Officer
- Aging summary (but information is incorrect?)
 - Shows per loan, but also want per group, officer, branch
- Active loan portfolio position (per officer, branch, region, area, etc.)
- Monthly reports – loan officer progress, MFI progress
- Profitability
- Balance sheet
- General Ledger (GL)
- Loan product – how different loan types are faring
 - Interest per product
 - Income per product
- Loan Status report – per loan officer/group/branch
- Reconciliation report - want a report that will help me do a quick reconciliation, be able to integrate what I have in the bank and what I have in the GLs, upload report and reconciliation is done by system
- M-PESA link transaction
- Density of group meetings in geographical region (for analysis of coverage)
- Branch (MFI) Progress Report – very good set of data, but should be able to get loan details from this report
 - Doesn't display data for section called “Profile of loans in arrears” – bug?
 - Branch Progress Report is really good data, but a lot of data is missing
- Collection Sheet Report
 - combines all loans into single amount

- doesn't show savings data
- End of Year Closing – need to see prepayments
 - Something about total in arrears is calculated from total portfolio amount and not outstanding amount? Makes portfolio at risk look larger than it should be?
- Insurance report
- Aggregated, high-level MFI reports with following parameters (per officer, branch, region)
 - Outstanding loan balance/portfolio size
 - Number of clients
 - Number of loans
 - Accumulated savings
 - New loans disbursed (within period)
 - Case load (capacity – number of loans related to total client)
 - PAR
 - Balance at risk
 - Amount repaid during that period (per officer, how much they have collected in period)
 - No. of staff (for branch and higher)

Recommendation: Allow for customizable reports by simply dragging and dropping columns (or selecting from a set) from which to create a report.

Field validation

Generally speaking, we should limit all fields to only applicable data. What is applicable may change, depending on the circumstance. For example: if a loan officer wants to see “all clients” it should be limited to his clients. If the data entry person wants to see “all clients” it would probably be all clients in the branch.

I have not outlined here all fields that should be validated, just ones brought up by customers.

Customers asked for:

- Don't allow duplication of clients– notify if ID entered is a duplicate of an already existing one and don't allow it to be entered again
- Date of birth and govt. ID must be an editable field (can configure to be non-editable or editable only by sys admin)
 - However, once a loan has been insured, this data can no longer be edited (as this info has already been shared with insurer and changing it would negate insurance)
 - If no loan exists for a client (ie. No insurance is given) then this data should be editable
- Date field –

- First, date fields should use a calendar widget for selecting a date (not require entering a month, day, and year separately)
- If the date is restricted, as in selecting a meeting date when meetings occur weekly, then calendar widget should be restricted to only selecting valid dates.
- If the date that the client can make a payment is NOT restricted to a meeting date, then the date field should not restrict the possible dates for payment.
- Need to be able to predate

Recommendation: Review all data entry fields and limit them to only applicable data where it makes sense.

Dashboards

Everyone liked the idea of dashboards specific to a user or role. We probably want to choose a common set of default dashboard components, but allow the customer to customize these to their liking.

Below is a list of possible items people said they wanted to see on each user's dashboard. (I did not edit this list too much because I don't know exactly what all these things are and I didn't want to merge ones that weren't really the same.)

Loan Officer Dashboard

Also called Field Officers, Credit Officers, Project Officers (SECDEP), Business Relationship Officers (Jitegemea), MicroFinance Officers (MFO – Juhudi)

- My client standings
- Meetings coming up for week
- Meetings/Plans for day
- Things pending
- To-do List
- Clients Due
- Savings (collateral) due
- New loans needing approval/disbursal
- Number of customers
- Number of loans
- Balance at risk
- Portfolio at risk (PAR)
- List of people in trouble (red flags)
- Groups that are struggling
- Portfolio outstanding (with and without interest)
- Accumulated savings for all clients
- Current month info
 - Amount collected

- Amount disbursed
- Number of loans
- Number of new members
- Number of exited members
- My Center repayments on a daily basis
 - Target vs. actual per day
 - Which customer
 - Repayment amount
 - Loan outstanding
 - Loan product
 - Which village, how far
 - How many disbursements expected for day
 - Total loans to be recovered
 - Total amount of loans
 - Amount in arrears
 - Amount of prepayment
- Target vs. actual for fiscal year
- How many products have been offered to each customer? (Grameen)
- Performance graphs
- Notifications
 - Such as: political riots taking place at this location
- DON'T NEED (which is currently part of Performance History)
 - Loan cycle/product
 - Total loan portfolio

Loan Officer Incentives

Note 1: I'm including this as part of the Dashboard lists because incentives are probably one item that should be tracked on a dashboard.

Note 2: if one loan officer's portfolio is transferred to another loan officer in the middle of an incentive period, need to be able to track how much time the portfolio spent with each loan officer so that incentives can be distributed fairly.

- Member handling (% in arrears?)
- Member formation (how many new members)

For Grameen – target is set based on Loan Officers own capabilities, each determines their own targets. Other organizations don't incentivize yet, but would like to.

Juhudi - Reward schemes

- Best MFO
- Kiva awards – office gets financial rewards
- Best disbursed branch – monetary

- Annual gala (Christmas party) – trophies for top performers
 - If a person can keep trophy for 3 years straight, they get to keep it forever

Data Entry Dashboard

- only one data entry login? More than one person cannot log data at same time?

- Repayments for that day (total for all loan officers responsible for)
 - From which credit officer, how much
- Disbursal for that day
 - Amount
 - Which centers
- Incomplete disbursal data?
 - documentation isn't done
 - some signing is not done
- Percentage of repayments collected for day
- Percentage of disbursals given for day
- What is pending
- Cash balance
- Bank balance
- Notifications

Branch Manager Dashboard

- Aggregate of all centers
 - How many centers are coming up for new loan in next month
 - Today's repayment, center-wise, total amount to be collected
 - How much disbursal in next two days (sanctioned amount)
 - Which centers which are pending for sanction, everything is ready but has to be sanctioned
- Plans for the day, what is pending
 - Amount due today
 - Amount collected today
- Loan Officer performance (for incentives)
 - How many groups/centers
 - How many clients
 - Average per group/center
 - How many loans given?
 - Amount of loans given (portfolio)
 - Average per center
 - Amount of loans recovered?
 - Clients in arrears? (percentage?)
 - PAR (portfolio at risk)
 - Perhaps also how many clients have prepaid enough to avoid going into arrears during holiday

- How well they follow process and guidelines
- What percent of branch customers fall below poverty line (PPI)
- How many PPIs have occurred and how many are due
- Performance graphs
- Notifications
 - Such as: new office orders, policy changes, elections coming

Area Manager Dashboard

(for Grameen – about 10 branches per area)

- Same as branch manager but aggregated for all branches
- Average staff per branch
- Portfolio per branch
- Number of customers per branch
- Branch performance
 - Ranking
- Staff performance
 - Ranking

Regional Manager Dashboard

(for Grameen – up to 50 branches)

- Same as Area Manager dashboard aggregated for all areas

State Head Dashboard

(Grameen only? – 2-3 regions in one state)

- Same as Regional Manager dashboard aggregated for all regions in state

IT Manger/Sys Admin Dashboard

- How much time each person is using the system, what is usage
 - like branch manager, cashier, data entry
 - login times, login and logout
- If an employee leaves company, need to disable account
 - Need to see which accounts need to be disabled?
- Notifications

IT Dashboard

(as per Grameen usage, IT monitors daily collections) – could be Data Entry

Note: nobody else seems to monitor the daily collections to quite this degree. In fact, most other organizations often don't log all the collections on the same day they, so they need flexibility to backdate collections.

- 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?
- Use this data to follow up with branches that aren't keeping up.
- This tracking is used only for collections, as disbursal is more variable. However, branches have a set amount that must be disbursed in a given week, so they look at if disbursals are below 50% it means something is wrong. They will call to follow up.

Accounting Dashboard

- Total collections for day
- What are receipts and disbursal expenses
- Longer term basis
 - profit and loss
 - income and expenses
 - Notifications

Audit Dashboard

- Audit checklist (did not get specifics on this list)
- How many loan applications per staff per month
- How many new members per staff per month
- Number of loans (of each type) per branch
 - Use this information to figure out how many to sample for audit (want to audit 10%, for example, not 10 loans.)
- Absenteeism ration per center
 - Want to audit centers that say they have 100% participation in a month because this is very difficult to achieve, so they can check what is really happening

Center Performance (including the performance metrics as they should probably be one dashboard component for more than one dashboard.)

(for Loan Officer, Branch Manager – aggregate of all centers)

- Attendance

- Loan utilization, how much outstanding vs how much is taken
- Good, problem or risky
 - Risky centers – how risky they are
 - Attendance < 60%
 - 1 customer should not be absent for more than 6 times
 - poor discipline
 - normal cross lending – not more than one member cross lending and there is no RP problem due to cross lending
 - misutilization of loan, more than 50%
 - high debt level of center members, although no problem with discipline or RP
- Who created center/who is current owner (responsible for repayments/collections owner)
- If center is up for a new loan within certain period, closing on certain day

Branch Performance

(for Regional/Area managers, Branch manager)

- Activity – how many people have taken loans for different purposes
- Disbursal Amount
 - Per customer
 - Per center
- Village penetration
 - How many villages we've penetrated
 - How many households we've penetrated
 - Number of centers per village
- Average center size
- New centers, old centers
- Distance of village from branch – implications on how efficient they are, if starting to get too far from branch, might want to open a new branch

Client Page

(In addition to existing client data)

- PPI score and date last score taken
- At a glance – how many loans do they have?
 - Do they have savings?
 - Total loaned
 - Repayment record
- How much is prepaid (to keep from going into arrears during holiday time)

Recommendation: Create a set of dashboard components from which the customer can build dashboards for each of their users/roles. Perhaps these can even be customized by the user themselves. I will provide designs and mockups for these.

Security

Passwords/Login

- Ability to set time for which password must be reset
- Notifications to reset password
- Password complexity
- Ability to remove an employee from system access easily when they leave MFI
- Restrict login to a single computer?
 - If one person is logged in with a particular role, don't allow another person to log in with that role
 - This might be alleviated if all people have their own logins.
 - Only allow one tab to be open per login? Avoid making data entry mistakes with multiple tabs with same data

Checklists

Several people brought up the idea that they want a step-by-step checklist that prevents the user from moving to the next step if the previous step has not been completed. From my reading of the documentation, it seems we have this functionality, but I don't really know how it works (hard to use in a demo). Also, customers don't seem to be aware of this functionality, or it doesn't work the way they want it to.

This is a list of possible checklist items. I think that by providing as comprehensive a list as possible, we could offer these lists so that each organization could check or uncheck any items that pertain to them, specify if they are optional or mandatory (if optional, we notify them if the step has not taken place, if mandatory we prevent them from going to next step until it is done.) Or we allow them to create their own checklists.

New Group Checklist

1. Preliminary screening
2. Fill out group registration form
3. CGT (compulsory group training) – given to newly formed group
4. Members begin saving for collateral fund (if necessary)

New Member Checklist

1. Preliminary screening
 - a. Individual assessment
 - i. Actively involved in income generating activity
 - ii. Establish creditworthiness
2. Collect member data
 - a. Govt. ID
 - b. Photo
 - c. Spousal info
3. PPI data collected
4. Member accepted to group

5. CGT (compulsory group training) – member must complete
 - a. This takes place for whole group when formed, new members need not go through whole training, just updated by Loan Officer (Grameen)
 - b. Re-interview by branch manager
6. GRD (group recognition test) – after 5 days of training, area manager will make sure training is done, decide if member can be activated (Grameen)
7. Verify M-PESA account (for organizations that use M-PESA)
8. Member activation (first meeting)
9. When member leaves:
 - a. PPI data collected
 - b. Make sure all loans are repaid (close out all existing loans)
 - c. Member inactivated

Loan Application Process Checklist

1. Loan application completed
 - a. Photo
 - b. Affidavit
 - c. Govt. ID
2. Loan application entered into Mifos (if step 1 is on paper)
 - a. Photo
 - b. Affidavit
 - c. Govt. ID
 - d. PPI questions entered (does this go here?)
 - e. Collateral fund is 20% (or other specified) of loan amount (for organizations that require a collateral fund)
3. Send application to credit bureau
 - a. Check overlap report (cannot have loan with more than 2 MFIs)
 - b. Check if client has been rejected or defaulted from another MFI
 - i. If any are true, send to cancellation state
 - ii. If all are false, send for approval
 - c. Credit report entered into system
4. Application pending approval
 - a. Loan committee looks at details
 - i. Was last loan repaid properly?
 - ii. Proper behavior?
 - iii. Absenteeism
 - iv. Personal details discussed by loan committee
5. If approved, loan set to Application Approved state
 - a. Sanction letter provided to client (show it has been received)
6. When sanction letter is given, loan set to Loan Sanctioned state
 - a. Can define multiple levels of approval
7. Loan ready for disbursement
 - a. Disbursement date set
 - b. Check cut, if giving check
 - c. Funds made available, if giving cash or transaction thru M-PESA

8. Loan disbursed
 - a. If cash, client given voucher to take to branch office to collect cash
 - b. If voucher is not redeemed within specified amount of time, loan is cancelled and process must start over (credit bureau check may no longer be reliable)
9. LUC (loan utilization check)
 - a. Make sure loan is utilized for specified purpose (record in system)
 - b. Notifications sent to Loan Officer for next LUC

Collection Sheet Process Checklist

- Do not allow duplication of checklist entry
- Show checklist entry as progress bar? How much entry is still required for this collection sheet before it is complete (may take more than one day?)
Need to be able to see this data for any given day

Recommendation: Make it easy to create checklists that allow for either preventing next step or warning users before attempting to go to next step. I will provide designs and mockups for this.

Collection Sheet Improvements

People generally like the bulk collection sheet, it is very handy for them. However, there were some improvements they wanted.

- Need ability to add additional fees from collection sheet. For example: if coming late to a meeting incurs a fee, if the data entry person sets the field to “late present”, fee should be automatically added to collections sheet. Should not require going back to loan page to add this fee. This should be configurable for each type of fee.
 - If a fee is automatically incurred when late (or other reason), the fee should be automatically added to the collections sheet and not require user to go back to loan and add it
 - If a fee is not automatic, user should still be able to add it on the collections sheet and have it automatically added to the loan page
- Need to see fees separated by type, not just lump sum of all fees
- Need a column for savings
- Issue for Missions of Hope – like Grameen, they enter all repayment collections first and then later go back and enter disbursements. In Grameen’s case, the collection sheet data is prepopulated with all collections and disbursement data for that week (meeting). In Missions of Hope case, it seems the collections sheet shows all repayments are set to zero and they must type them in each time. Wondering if this is because they did not select Fixed Repayment Schedule when creating the loan?
- Need a way to tell if data has already been entered into collection sheet (Grameen and Missions of Hope both enter collections at one point and disbursements later). As the data entry is done manually, and sometimes not

by the same person, they are relying on the person to mark the collections sheet correctly so data isn't entered twice. Also MOH tracks collections sheets by serial number (of physical receipt book) and not by date.

- One suggestion was to have a collections sheet report that shows, for any given day's collections, what has been entered and what is still pending.
- I was also thinking that a progress bar on the dashboard would be a good way to quickly see if a collections sheet is complete. This would have a date picker as well, so the user could see collections sheets for more than just today. Perhaps it would require verification if the user wanted to enter collection sheet data for a date that is not today, just to make sure they aren't entering data for the wrong date.
- Need ability to enter a date on the collection sheet, rather than it being fixed (assuming collection sheet is for today)
- Would like collection sheet to show
 - Outstanding balance per loan
 - Prepayments per loan
 - For Missions of Hope and Jitegemea, clients are encouraged to prepay.
 - Would like collection sheet to show any overpayments or underpayments
 - If underpaid, Mifos considers loan in arrears, even if MFI has a grace period, making the PAR too high. Need to consider grace period before marking a loan in arrears.

Recommendation: Tweak collection sheet to be more easily readable (color, striping, bigger fonts) and provide additional features like ability to add fees directly to collection sheet and ability to see collection sheet data for any given day. I will provide designs and mockups for these.

Change Tracking

As noted below, if a loan officer is transferred in the middle of an incentive period, it is important to know how long each of two (or more) loan officers were responsible for a portfolio for how long to distribute incentives fairly.

- Track PPI over time
- Track PPI scorecard changes (when questions change, need to keep old ones and new ones)
- Need to know which scores came from which scorecard questions.
- Capture and track changes to MBDF (member basic data form)

Transfers – without modifying data (apparently when transferring a member from one group to another, they must close out loan first.)

- Ability to transfer a member:
 - from one group to another

- from one branch to another
- from one loan officer to another
- Ability to transfer a group:
 - From one center to another
 - From one meeting day to another
 - From one loan officer to another
- Ability to transfer a loan officer
 - From one group to another
 - From one branch to another
- Need to maintain a history for all this information. Data should not reset when member or loan officer is transferred.
- Need to track who comes and goes from a group/center.

Mergers

- Ability to merge 2 groups into a single group

Recommendation: Provide more comprehensive change tracking. Need to look at UX implications.

Notifications

This is a list of notifications customers asked for. There may be more we also want to include.

- Alert if client tries to take new loan when outstanding loan amount is higher than a specified amount (currently this has to be done manually)
- Alert to do new PPI when latest PPI for a given member is older than one year
- Alert to update MBDF (member basic data form) when necessary (every 2 years? – configurable)
- Alert branch manager when loans need approval
- Alert Loan Officers (if using tablet?) that next meeting is coming up and where (this probably needs to be optional in case LO isn't using a mobile device)
- Alert that collections for day is not complete (probably make time this alert appears configurable)

Other

These are other issues that didn't fall into the top 10.

Loan Product Issues

- Support individual loans
- Support loans that can be disbursed in tranches
- Support pension product – Mifos currently doesn't have
- Support insurance products

- Support loan products for particular types of assets
 - Ability to subcategorize loan products? For example: farm loan can be subcategorized into dairy, poultry, vegetables, etc. (because the businesses are very different) (Jitegemea)
- Need ability to do monthly or bi-monthly loans
 - Payments are 12 or 24 instead of 26
 - Need to be able to allow monthly loans for a client in a weekly group (and vice versa)
- Seasonal loans that work with flat interest (currently only declining interest)
- Moratorium period – needs to be configurable. Currently only interest-only moratorium.
- Ability to create loans for household items. When MFI has partnered with a vendor, MFI gives 2 part voucher to client. Client goes to vender to “buy” item, vender takes ½ voucher. MFI then pays vendor directly for item, member repays in installments. No preauthorization.
- Emergency loan criteria – need to be able to configure this type of loan. No preauthorization, but certain criteria must be met. For example:
 - Member must have a regular loan
 - Can only be issued to 50% of members in a given week
 - Member can only have one emergency loan at a time
 - Outstanding loans must be less than specified amount
- Need ability to specify, for any given loan, whether or not the client can have only one of this type of loan at a time. (or more generally, perhaps the number of loans of a given type that can be taken by one member is configurable.)
- Should be able to restrict certain loan types to certain branches (for piloting purposes)
- Business rules definition
 - Star status for loans (give certain rating to different loan types, for example: cooking product loan is one star, sanitation loan another star) – client gets more stars for taking these loans (encourage them to take the loans) Can help determine PPI level
 - Clarify this
 - Customer intelligence – making intelligent business decisions about what products are relevant to them
 - Some areas are very drought-prone, might need certain products
 - Provide a definition of a client who is more likely to default – then be able to flag a client who is meeting (or coming close to meeting) this definition, so we can try to prevent default. Data must be reliable to do this.
- Loan approval configuration
 - Specify how many levels of approval
 - Specify that certain approvals are required based on size of loan. For example:
 - Super small loans can be approved by loan officer

- Regular loans can be approved by branch manager
 - Large loans need regional or area manager approval
 - Validation of this limitation
- Support for group customer to graduate to individual client
 - Could be with group for so long
 - Group disputes and disintegrates, but we know that a client is good
 - No set requirements
- Sanction Letter – Mifos does not currently allow for tracking a sanction letter (loan cannot be approved until sanction letter has been given to client)

Member Info

- Current KYC data does not include which ID a client has given (there are several types of IDs in India). Want to know because client can give a different ID and look like a different person. Every three years need to collect ID from client, but they can give different ID – want to make sure it is the same ID. If they give a different ID, want to track both.
- Want Mifos to block insurance if member (or spouse) is over 60. (Grameen)
- Need to be able to edit marital status – if a member becomes divorced, the word “left” is appended to the name, but this is not tracked as a marital status change. If member or spouse is deceased, word “late” is appended to name. Need marital status to be tracked accurately for insurance purposes. (Grameen)
- Need MBDF (member basic data form) in Mifos. Includes
 - Address
 - ID
 - Name
 - Family data
 - Income levels
 - Assets
 - PPI
- Next of Kin – currently can only choose father or spouse. This should also include mother, daughter, son, maybe others?

Sanction Portal (kind of like a preapproval letter, used by Grameen)

Not sure why these guys use a separate portal for this?

- Which loans have been sanctioned
 - Amount approved may be less than what was requested
- Which loans are pending sanction
 - Require documents from client first?
- SECDEP uses a Letter of Understanding (LU) – same?

Mobile Technology (more informational than design related)

- Use to track loan officers (make sure they are where they are supposed to be)
 - Use this data to help make process more efficient

- Use to authenticate members (voice recognition to authenticate member attendance) – do not allow loan disbursement to absentee member.
- Ability to link mobile payments to bank accounts and have Mifos track this automatically

PPI

- Need ability to update PPI scorecard (currently not easy?)
- Want client screen to show PPI score and what date it was taken
- Would like to see a graph of how PPI score has changed for a given client over time
- Tracking client's well-being – is PPI the best way to track this or is there some other ways that are better?

DB/Configurability

- Mifos DB currently limits total amount of funds, total number of customers, needs to be more for growth
- Would like configurability of account numbers and how they are generated
- Need ability to freeze collateral funds (optional, some do not freeze this account)
- Need ability to make client inactive when they leave, rather than closing them. Always want to inactivate so client can come back. Right now when they close out a client, they must go to DB to erase them and start over if they come back because DB won't let them use same govt. ID again.
- Ability to tie a loan to a funder. Ability to track where money comes from and where it goes.
- Need ability to determine, for each loan type, which roles can approve. (Currently can only set a role to approve or not approve loans, cannot specify which loan type a role can approve.)
- Need ability to archive data (want a lot of data captured) but easily retrievable

Miscellaneous

- Lead Generation – ability to track people that aren't clients yet, but the loan officer is actively working on converting to clients. Want to track the work they have done towards this goal, so that this list of potential clients and any screening or individual assessment work that has been done is not lost and/or duplicated.
- Search needs to return more information on client to be able to uniquely identify
 - a. Currently returns: name, ID, loan officer, status of loan
 - b. Would like to also see: address, middle name (if any), gender, village – something unique
- Up-front loan fees should show in UI
- Some way to encourage members to prepay. Usually in cases of an upcoming holiday, such as Christmas week when there are no meetings and year-end

- books need to be closed in early part of new year, so want clients to be up-to-date so PAR doesn't look so bad. (If client is in arrears, PAR goes up.)
- Show on client page how much client has prepaid.
 - Perhaps Loan Officer incentive to make sure client has prepaid enough to keep them from going into arrears for holidays?
 - Guarantors – most groups have all members as guarantors for all loans, but need ability to select which members have agreed to guarantee another's loan (probably should have a checklist of member names with the default of all selected and person creating new loan can uncheck members who are not guaranteeing this loan)
 - Allow for integrating Kiva or Big Dent import/export to Mifos
 - Bug – on a page showing a Loan in Bad Standing – the Performance History shows Portfolio at Risk: 0. Looks like a bug.