



Abacus MFI Product Description



Abacus MFI Advanced Microfinance and Banking System

Abacus MFI is the microfinance variant of Fern's latest and most technologically advanced software package, Abacus OneWorld. Abacus OneWorld has been tried and tested and is recognized by users and consultants alike to be a product that is well ahead of its time and well ahead of its competitors. Abacus OneWorld is the result of 30 years' experience plus 10 years' development. It was designed by accountants and developed by a core specialized team. Released in 2004, now has client institutions in 30 countries around the world, supported by global network of regional partners.

The Abacus MFI Value Proposition

Our value proposition is a totally integrated, easy to use system that will protect your investment over the long term, based on a single integrated platform for all current and future activities. Abacus MFI offers a cost effective, modern, fully integrated and scalable solution that will not only meet your current operational requirements, but also your requirements long into the future. Based on Microsoft SQL and .NET, Abacus MFI integrates all data processing, financial management and client services into one efficient management information system. Abacus MFI will deliver specific and quantifiable benefits to justify the business case for investment. For example to:-

- Increase outreach without increasing costs
- Reduce existing operational costs
- Expand your business through product and service innovation
- Better manage risks, and thereby reduce losses
- Attract wholesale funding at improved rates by demonstrating prudence and efficiency
- Monitor and demonstrate social performance and impact.

Specialist Microfinance System

Abacus is a designed for microfinance institutions and credit unions, not a banking system that is adapted to microfinance. It supports group loans, each with a wide range of individual loans, with multiple guarantor, business and family relationships. Abacus supports flat rate and reducing balance loans, with a huge range of interest calculation and scheduling methods and fee structures. It also supports village banks and self-help group structures.

Client-Centric, Clear and Transparent

Abacus focuses information on all loan accounts and transactions, current and historical, into a single client-centric view, together with photo and signature identification, and stored, scanned documents. This makes it easier for users to make decisions quickly and safely. Abacus supports deposits/savings and insurance in addition, and integrated with, loan tracking. Loans can be disbursed to and repaid from deposit accounts, and minimum and blocked savings can be tracked with linked loans. At an operational level there is no separate savings or insurance "modules", as these are integrated into the single view of the customer. Abacus is very easy to use, with an

intuitive user interface that can be modified to suit job descriptions (e.g. by removing unauthorized tasks).

Flexible Loan Product and Process Design

Abacus allows for multiple loan approval processes, ranging from the quick and simple to the comprehensive and complex, with a simple workflow designer that allows these processes to evolve over time and in the light of experience. Abacus has very flexible collateral management, allowing for revaluation, estimates of resale value, expiry dates, etc.

Excellent Credit and Operational Risk Management

Abacus has excellent management of portfolio at risk at the institutional, branch or loan officer level. This will allow you to focus in on operational as well as credit risks by identifying areas of the institution that are most prone to risks. For delinquent loans, Abacus has a very powerful module where collection workflow can be designed and mandated, and where collections can be managed and monitored.

Integrated General Ledger

Abacus has an integrated General Ledger. The chart of accounts can be specified at implementation but must conform to IFRS standards. The mapping of postings from loans, deposits, fees, insurance and entries is set up in a simple point-and-click process at implementation, and thereafter postings are all automatic.

Social Performance/Impact Monitoring

Abacus allows you to set up and continuously improve a structure of data (financial and non-financial) in user-defined fields and analysis codes. These are simple point-and-click functions that can be setup by an authorized user administrator. This does not require programming or similar technical skills and you can set up as many as needed, and add to them at any time. Users can be asked to key in free-form data or to select from drop-down list. This allows you to record social performance/impact data, and to develop the structure of data recorded over time.

Optional Modules

Abacus also provides you with a strategic platform for your future growth through a range of optional modules that you can add as and when they are needed, for example:-

- SMS alerts and marketing
- Mobile phone and internet banking
- Electronic funds transfer (disbursement/collection) via the banking system
- Connection to ATM/POS
- Business intelligence tools*

Front Office

Easy to use cashier and teller functions for all Front Office activities:-

| ITEM | FRONT OFFICE MODULES | DESCRIPTION |
|------|---|--|
| 1 | Client/Member Maintenance | Set up, edit, activate, or de-activate existing clients |
| 2 | Cashier/Teller | <p>Transactions: post loan repayments, disburse individual loans, adjustments. Print individual receipt vouchers; share deposits and withdrawals.</p> <p>Reporting: mini balancing statement; summary and detailed collection sheet.</p> <p>Enquiries: easy to use screens for general and comprehensive details on individual clients.</p> |
| 3 | Loan Origination | Application, Approval, Disbursement and user defined workflow control. |
| 4 | Biometric ID | Capture photo, signature, etc. for automatic insertion in client's data for easy storage and retrieval. |
| 5 | Document Scanning | Built-in scanning of original documents, attached to individual client records and available for easy retrieval on any terminal. |
| 6 | Foreign Currency Exchange | Provide a foreign currency service for clients – buy/sell daily rates; commission; stock of foreign currency maintained. |
| 7 | Cash Management | Cashing up by Cashier /Teller and transfer to Vault/Bank. |
| 8 | Guarantors and Collateral | Very flexible recording and monitoring of guarantors linked to various accounts; collateral date and valuation recorded and monitored. |
| 9 | Insurance | Configuration, collections, accounting: loan protection insurance, calculate commission on premiums, refunds on early loan clearance. |
| 10 | Customer Relationship Management (CRM) | This allows you to maintain a complete record of the institution's interaction with each client including interviews, requests for information or forms, synopsis of phone calls, complaints and how they were dealt with. |

Figure 1: Front Office Modules

Back Office

Comprehensive Back Office support

| ITEM | BACK OFFICE MODULES | DESCRIPTION |
|------|--|--|
| 1 | Integrated General Ledger | Full posting to integrated GL of Journals and configuration of journal entry types; provided pre-configured Chart of Accounts for customisation. |
| 2 | Financial Reports | Automatic production of financial reports - Trial Balance, Income Statement, Balance Sheet. |
| 3 | Bank Reconciliation | Integrated bank reconciliation of all bank accounts – including cheques written to pay expenses. |
| 4 | Management Reports | Comprehensive range of specially designed reports: Cashier and Collections, Loans, Balances, Loan Portfolio Management, Financial, Regulatory. |
| 5 | Branch Accounting | Set up separate branch accounting function with full independent reports and analysis; restricted users and clients to specific if required. |
| 6 | Batch Processing | Process recurring batches – payroll deductions, standing orders, direct debits and other 3 rd party transaction files. |
| 7 | Loan Portfolio Management | Range of management, inquiry and reporting options. Identify non-performing loans quickly, monitor Loan Officer performance. |
| 8 | End of Day | Daily balancing and update all postings to GL. |
| 9 | Regulatory Reporting | Country specific regulatory reports built in – produced automatically and may be emailed to Regulator |
| 10 | Anti-Money Laundering (AML) | Suspicious Activity Reporting (SAR): this user configurable reporting tool allows you to identify unusual transactions by pattern, amount or exception. Complements recording of approved forms of ID for personal and address verification. |
| 11 | Reporting Services | Built-in report writer to allow users to design one off ad hoc or periodic reports. |
| 12 | Social Performance / Impact Reporting | Allows your organisation to measure its social goals, governance, social responsibility, transparency, HR performance, environmental impact, poverty outreach, lending methodology, enterprises financed and retention. |

Figure 2: Back Office Modules

Additional Supporting Modules

Below is a list of optional modules that may be added to the above modules.

| ITEM | ADDITIONAL SUPPORTING MODULES | DESCRIPTION |
|------|--|--|
| 1 | Advanced Credit Management | Workflow management tool to manage the internal and external legal processes for debt recovery. Manage your delinquency with one-click control — automatic selection, generate task list, integrated with calendar and easy retrieval of notes, phone calls etc. |
| 2 | ATM/POS Link | Provides link between Abacus and the organisation's own automated teller machine. The access cards and pin numbers are maintained locally and the transactions at the ATM are automatically registered in Abacus. |
| 3 | Automated Field Operations (AFOS) | All transactions that are captured on the Smartphone/Tablet terminal are uploaded to an AFOS server (simple PC). The data then moves through a connector to Abacus. |
| 4 | Appraise | Comprehensive due diligence toolkit. Facilitates detailed analysis of existing loan products and their performance plus full financial analysis of all assets and liabilities |
| 5 | Budget Account – Universal Credit Account | Allows clients pay large periodic bills on time by making separate regular budget savings. Speedy payment to third parties (car / house insurance, by the Abacus EFT function. Also useful where social welfare payments are made directly to the institution for onward transfer to 3 rd parties, e.g. rent for landlords. |
| 6 | Business Intelligence | Converts data into useful easy to interpret information and presents it in graphical format; can be used to compare with other organisations of a similar size and operation. |
| 7 | Business Planning Toolkit | Allows users to project three years performance for budgetary monitoring and control. |
| 8 | Card Management | Authorization and validation; Card production; PIN management; Card and account status management; Management information and reporting. |
| 9 | Credit Reference Link | Integrated with established credit reference providers, e.g. Equifax, Experian, ICB. Produces output file for transmission to credit reference agency and allows easy access to credit searches |
| 10 | Director's Dashboard | Assembling the wealth of data within Abacus and presenting it in a more intuitive graphical format – particularly aimed at |

| | | |
|----|---|--|
| | | quick interpretation by senior management and directors. |
| 11 | Electronic Funds Transfer (EFT) | Allows you to make loan issues or withdrawals electronically without the need for a paper cheque. Direct transfer into the client's account to save time, postage and any delays. Links to third party payments provider to facilitate payment of bills, transfers to other bank accounts and receipt of deposits through the banking network. |
| 12 | iConnect | Financial institutions can now securely process transactions with each other in real time through a centralised server. When connected through a correspondent bank the institutions can access the bank clearing system, to make third party payments and lodgements. |
| 13 | Internet Banking | Online Loan applications, Balance Enquiries, Statements, Payments, Transfers. Drill-down for detailed history. Real-time update from Abacus. |
| 14 | Mobile Phone Banking | Internet banking on mobile phone: - online Loan applications, Balance Enquiries, Statements, Payments and Transfers. Drill-down for detailed history. Real-time update from Abacus. |
| 15 | Multi-currency Multi-lingual | For clients processing multi-currency transactions this allows full conversion for the Teller and in financial recording and revaluation. The multi-lingual user interface is most welcome for users in many different countries – presently in six languages and can be customised for individual countries. |
| 16 | Remittances | Allows the user to design and produce reports to their own specification for one-off or repeat usage. |
| 17 | SMS Texts | The Abacus SMS banking service delivers account updates on demand to clients and provides updates on all accounts. This service is useful for alerts, promotions, balance updates, transaction confirmations and security PIN messages. |

Figure 3: Additional Supporting Modules

Abacus Core Product Feature Summary

- Customer information
 - Client centric
 - Address/personal details
 - Employer details
 - External bank accounts
 - Customer list
 - Customer analysis fields
 - User defined fields
 - Group clients (Grameen)
 - Area & centre (for village bank)
 - Loan cycle count (counting how many loans are out)
 - Reactivate closed client
- Document management
 - Document management
 - Document scanning
 - Photo & signature identification & storage
 - Card identification
 - Multiple id/document retrieval
- Customer relationship management
 - Calendar / appointment manager
 - Track meetings with clients
 - Track loan reviews
 - Customer letters
 - Portfolio quality management
 - Savings portfolios
 - Loans portfolios
- Accounts
 - Savings
 - Full configuration of saving & deposit accounts
 - Shares/members
 - Fixed/term deposit
 - Loans
 - Comprehensive cheque book management
 - Tracks cheques deposited by client
- Multicurrency
 - Foreign exchange transactions
 - Individual Forex rates for cash/cheque/TT
 - Individual Forex rates per branch
 - Foreign exchange commission tables
 - GL currency revaluation
- Cash management
 - Cash handling
 - Configurable currency denominations
 - Advanced cash management options
- Transactions
 - Swift payment category recording
 - Advanced transaction analysis
- General Ledger
 - Customised chart of accounts
 - Multi-branch GL
 - GL analysis fields
 - Annual budgets
 - Real-time posting
 - Journal entry correction
 - Integrated Nominal / General Ledger
 - General Ledger reporting
 - Trail balance
 - Income statements
 - Balance sheet
 - Business planning forecast & planning
- Back office
 - Cheque processing
 - Teller to vault/vault to bank management
 - Process service fees
 - Process term deposit maturity
 - End of day processing
 - End of month processing
 - End of year calculations
 - Public holiday allocation

- Configurable anti-money laundering questionnaire
- Account analysis fields
- Linked savings (to loan)
- Customer batch processing
 - Payroll
 - Direct debit /standing order
 - Payments
 - Transfers
 - Fees
- Loan options
 - Grameen loans
 - Solidarity loans
 - Interest only loans
 - Village bank / centre
 - Loan top-ups and redraws
 - Balloon payments
 - Loan repayment insurance
 - Flexible loan schedule
 - Loan schedule calculator
 - Customisable loan process
 - Loan guarantors
 - Loan collateral
 - Advanced loan collateral settings
 - Grace periods
 - Deferred payments
 - Loan agreement generation
 - Loan cycle amount
 - Restructure /refinance
 - Group loan w/ individual tracking
 - Transfer of loan portfolio from loan officer to another loan officer
 - Transfer of collection centre from one officer to another
 - Merging of collection centres
 - Data collection sheet (bulk processing)
 - Option to recalculate loan schedules on holidays
 - Option to extend loan term when repayment date falls on holiday
- Maintain recurring holidays
- Public holiday per branch
- Detailed bank reconciliation
- Savings dormancy
- Accrual accounting
- Data import functionality
- Export functionality
 - To QuickBooks, Microsoft Great Plains, Microsoft Excel, Adobe PDF, Attaché,
- Reporting
 - Over 80 standard reports and the number of reports is continually increasing
 - PAR reporting
 - Crystal Reports templates
 - Output to .XML, .DOC, .PDF
 - Client statements
 - Loan portfolio quality management
 - Balance sheet/income statement/ GL reports
 - ATM log
 - Credit rating reports
 - Integrated Microsoft SQL Reporting Services
 - Allow user customized reports
- Security and risk management
 - Backup and restore facility
 - User group level security access
 - Individual user level security access
 - Audit reporting
- Help & support
 - Built-in help file
 - Data migration services
 - Access to global support team – phone plus remote access
 - Training database – copy of full database with real data for training
 - Regular product updates

Abacus Design Concepts

Modular Structure

The system offers standardized, yet fully-function and modern, core modules that will deliver higher efficiency, allowing increased outreach while reducing costs. The standard product provides comprehensive industry standard reporting platform for consistency, speed and accuracy, with built-in financial and management reports to assist compliance and governance.

Delivery Channels

The system has the flexibility to add new service delivery channels, e.g. mobile phones and tablets, as the .NET platform allows the addition of such channels relatively easily. In addition to the wide range of standard reports, the system allows the production of new reports using SQL Reporting Services and Crystal Reports. For those institutions that increase the complexity of their businesses, new Abacus MFI modules can be licensed and easily activated in the system.

Ease of Use

Fern Software has drawn on our 30 years of experience and customer feedback to ensure the operation and use of Abacus MFI is extremely intuitive and very easy to use. This has been a key factor in Fern's success to date as the large portion of our client's staff have limited or no prior experience with computer systems. Uniquely Fern offers a worldwide standard system that allows configuration for each individual user including menu options, icons, language, screen settings and background. This is in addition to the configurable parameters for optional and mandatory product settings etc. For these reasons **Abacus was awarded the best CGAP score in their Ease of Use category.**

Abacus MFI has been developed with the following characteristics:

- Navigation is intuitive as processes follow a clean and logical flow,
- Data entry is through clear and uncluttered forms,
- Most commands have additional keyboard shortcuts and associated icons,
- Simplified navigation between screens and functions following standard, which is familiar to Microsoft and MS Windows visual metaphor conventions,
- Omitting mandatory data, the system will prompt the user as to which fields need to be completed and guide the data input flow,
- The size of the icons, layout and positioning of the menus can be fully customized and set by users, and saved to their profile,
- Functionality and parameters can be established on the menu to make the interface as simple as required,
- Abacus MFI has a comprehensive, context sensitive Help File and user manual.
- Context sensitive Help files within Abacus
- Online help via direct access available

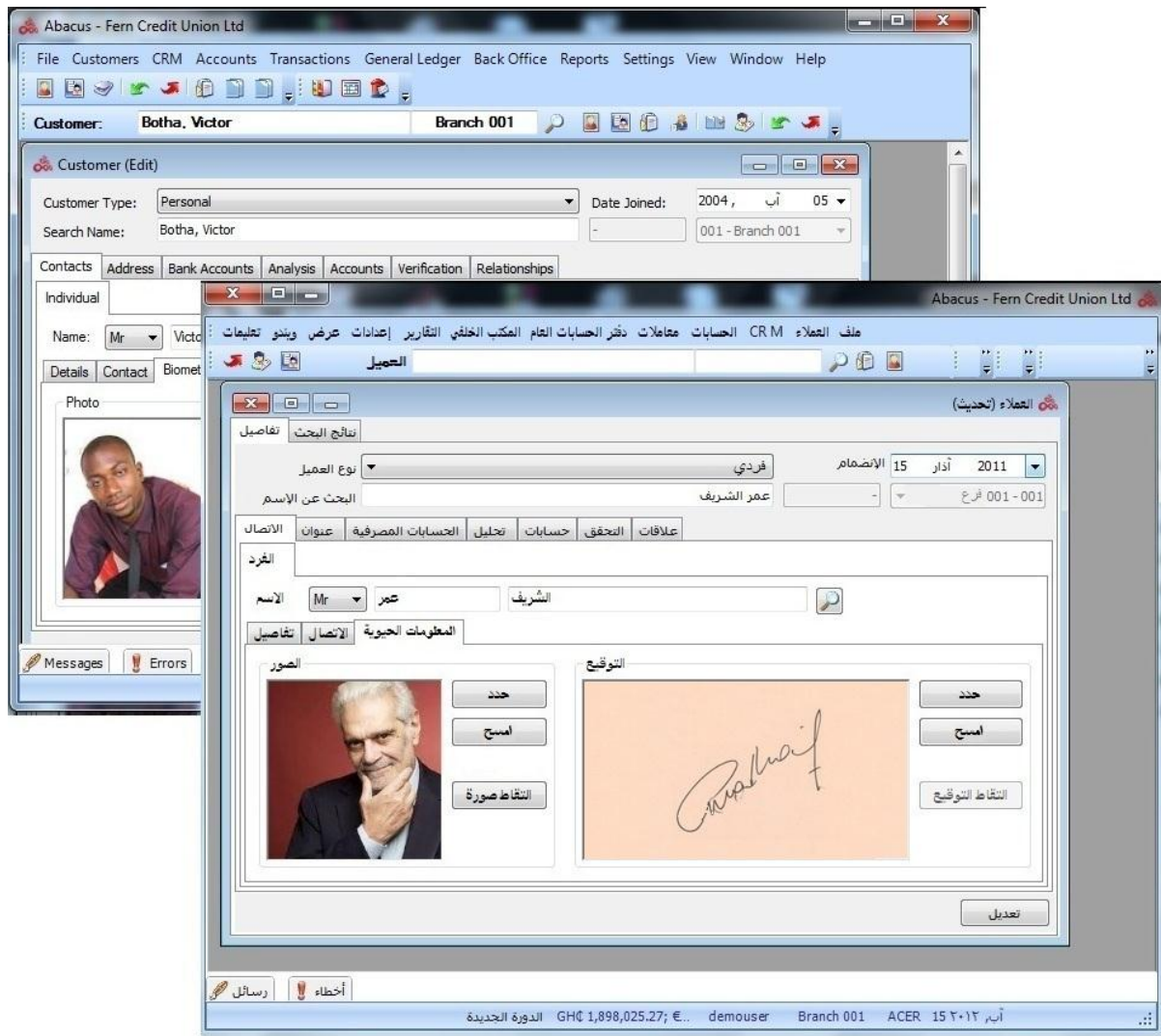


Figure 4: Example of Abacus Multi-Lingual User Interface

During implementation, usability and user training are complementary issues that are part of the overall Fern experience. As many clients have little in-house technical expertise, we have developed simple installation routines and upgrade functions that are simple and automatic.

Flexibility

Abacus MFI has a comprehensive loan processing capability that includes practically unlimited loan product creation. It also includes a user customizable workflow control. The Abacus MFI loan processing incorporates a wide range of loan product parameterization for interest, fees, grace periods etc. The user may also set up mortgages, collateral, insurance products and a variety of payment options to cater for seasonal cash flow, remittances and card payments. The loan schedule is totally customizable by the Loan Officer to meet seasonal lending requirements.

The interest rate is generally attached to the individual loan product but has its own configuration menu option for designing different loan interest parameters. This extends to penalty interest,

compound interest and tiered interest rates. Within the loan schedule further customization of the individual repayment plan is possible.

Within each loan product there is a full workflow option to configure the loan process for each individual loan product. The steps may be made mandatory or optional.

The system has the flexibility to add new service delivery channels, e.g. PDA's, mobile phones and tablets, as the .NET platform allows the addition of such channels relatively easily. In addition to the wide range of standard reports, the system allows the production of new reports using SQL Reporting Services and Crystal reports.

Scalability

One of the major themes throughout our research and development has been one of scalability and taking the long term view that we will be dealing with larger organisations in the future, as well as customers growing with us. As such, it has been a constant design principle that the performance of all aspects of Abacus MFI does not degrade markedly as the size of the data increases.

Security

Abacus has a very secure and flexible system for granting access rights to user functions. The functions of each user (or group of users) can be defined and controlled by password access. The user interface for each user can also be configured to remove buttons and menu items to which that user (or those users) does not have access. This feature simplifies the user interface for lower level staff, while allowing managers to access the full functions of the system. The use of SQL Server increases the level of security of the system, through Microsoft's high level of security and encryption, and allows for easy and secure database backup and recovery.

Abacus includes a powerful suite of audit and tracking functions and reports. The built-in audit trail and user access system ensures individual financial institution integrity and confidentiality of client data. A full audit trail on major operations performed on the data, such as changes to customer details, user permissions and product setup is recorded. This helps to identify attempted fraud at an earlier stage and to build up an environment of compliance and good governance across all users. Examples of audit information available include the time and dates changes were made, the record last edited or created, which user performed the change, and the terminal from which that the change was made, plus the old and new values. Banks can also run a report on staff who edited a particular client on a particular day. This allows for a strong level of accountability on any changes made to the data and provides the ability to trace events back to their original source. Being aware of the detailed and traceable audit trail also serves as a positive deterrent against internal fraud.

New Anti-Money Laundering reports will ensure full compliance with the ever present regulatory reporting demands.

Abacus contains a fully integrated cash manager, end of day processing and posting of balanced entries. For data integrity, it also includes transaction “Atomicity” that ensures all-or-nothing posting of entries. This prevents the one-sided entries that frequently occur in other systems on the market.

Reports Generation

Abacus MFI is an extremely powerful management information system which includes over 100 reports as standard. The system also allows the production of ah-hoc reports, using selectable parameters through an easy to use interface that requires no technical expertise. Reports can be run at portfolio, loan officer, branch and company level, as required, and based on date ranges. In the case of portfolio management reports, the definitions of “at risk” and “default” can be specified explicitly, e.g. PAR over 30 days, 60 days, etc. These dates are input at the time running the report.

Reports can be exported to Microsoft Excel (or Word, PDF) for easy analysis and exchange of data with other entities. Reports may also be emailed directly from within Abacus.

Abacus MFI includes – at no extra cost –built in SQL Reporting Services. This allows banks to design their own reports as per requirements. These reports may be run once or maintained within the Abacus menu system for recurring use.

Integration

The integrated general ledger allows banking operations to be reflected seamlessly and automatically in the general ledger. In addition, Abacus "forces" overall general ledger balancing on all accounts. Several import and export options are also available to allow Abacus to integrate with various third party general ledger applications if desired.