

## MFResolve® For Microbanking

The Microbanking sector has huge growth potential and there are real opportunities for banks with the right systems in place.

Microbanking is entering a new era. New lending programs – Gold asset loans, Affordable home loans, Small and Medium enterprise funding, Self-Help-Group loans, Agriculture loans, Microfinance banking, Islamic Microfinance – Individual and Group lending programs are consolidating and maturing into sophisticated financial products. Established banks are recognizing the value of Microbanking in extending their reach to new customers – an estimated billion of whom are currently unbanked world-wide. In a climate of rapid change and increasing competition, the successful players have to be innovative and equipped with affordable, durable and agile technical solutions for growth.

Gradatim is a technology company, recognized by world leader in Technology, Microsoft, as a **BizSpark One** company, that is building new age solutions for Microbanking. Gradatim, setup and run by banking professionals, supports customers in India and SE Asia, in managing Mass-retail and Microbanking products and services. Gradatim solutions are designed to leverage the emerging Cloud infrastructure, has active mobility extension that takes advantage of the growth of Internet, and conforms to the standards of Service Oriented Architecture and interoperability. MFResolve, Microbanking solution is being accepted by Banks and Tier 1 Non-banking-finance companies as among the most innovative solutions and one that best addresses the need of Mass-market retail and Microbanking products.

### Gradatim IT Ventures

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# Gradatim

*Simplifying Microbanking, Sustaining Growth*

# The Growth Challenge

Financial intermediation is structurally changing as alternative models of banking emerge. Technological innovation and pressure from regulators accelerate banks, in particular to financial inclusion programs for the under banked and marginally banked.

Regardless of whether growth occurs organically, as a result of consolidation, or through acquisition, financial institutions must be ready to support their businesses as they expand and deepen. To gain competitive advantage, banks must find new ways of working and deploy innovative technology solutions.

MFResolve is a solution capable of delivering new, tailored products to mass-market customers quickly, connecting customers through new emerging channels. It provides banks with a core system to capture, segment and service this mass-market customer base, as existing strategies for demographic profiling by gender, age and “key life events” cease to provide accurate insight into customer expectations.

**The drive for efficiency:** Bank’s legacy systems – core banking and loan origination systems – are not typically well equipped for the nature of Microbanking loans – high-volume, short-term and low-value products, deployed in scenarios that differ from the mainstream financial products.

The result is that many banks depending on homegrown solutions or solutions provided by correspondents and partners.



MFResolve is Microsoft Azure Cloud Ready

This results in poor operational controls, increases risk and fails to provide adequate management information.

**The drive for better Risk control:** The Microbanking sector is growing fast and are typically run from branches that are remote or inadequately staffed. This results in reduced monitoring at the time of lending that is often realized only at the time of default or fraud. Certain Microbanking products require fast turn-around that often results in further slackening of operational and risk control measures. There is a real need, generally, to improve control and security to ensure proper steps are taken and clear audit trails are maintained.

Several Non-banking-finance-companies and Microfinance banks do not even have the procedural framework in place for compliance and risk management.

## MFRESOLVE – IMPROVED EFFICIENCY WHILE ENSURING COMPLIANCE

MFResolve’s ability to monitor transactions in real time is unique. There are no intermediary steps and Rule based exceptions can be strictly enforced. In simple terms it is a solution that drives your efficiency, while providing the necessary control at all levels – member creation, loan acquisition, pre and post loan disbursement.

All this without losing your product and process flexibility – it has to be kept in mind that Microbanking is still an “Emerging Sector”.

Statement Of Accounts									
GRADATIM									
BRANCH NAME	PATTAHURPURAM	BRANCH ADDRESS	DR NO: 3-11-19, 3-11-20, 1ST FLOOR, OLD PATTAHURPURAM, GUNTUR DISTRICT						
DISTRICT	Guntur	STATE	Andhra Pradesh						
COUNTRY	India								
Account Number:	1279766700000	Account Deposited:	100000.00	Name:	KAMESHWAR				
Customer Code:	41750	Cash:	100000.00	Interest Type:	Simple				
Frequency:	Interest Credit	Change:	0.00	Cash Withdrawals:	0.00				
Account Type:	Savings	HEFT:	0.00	Change Issued:	0.00				
Interest Rate:	4%	Bounce Charge (Per):	0.00	FCS:	0.00				
NonReside(Yes/No):	Yes	Penal charges due:	0.00	Penal charges paid:	0.00				
Acct Open Date:	10th July 2012	Other charges due:	0.00	Other charges paid:	0.00				
Customer Balance:	100000.00	Total Balance:	100000.00	Status:	Active				
Opening Balance: 0.00									
Particulars	Narration	Increased By	Decreased By	Due Penalty	Paid Penalty	Due Bounce Charges	Paid Bounce Charges	Closing Balance	
11/07/2012	Initial Deposit By Cash	100000.00	0.00	0.00	0.00	0.00	0.00	100000.00	

## Convergence of Online and Mobile Technologies

MFRsolve for Microbanking is an innovative integrated solution designed ground-up for Microbanking and Mass retail banking products. Being fully scalable and configurable, MFRsolve for Microbanking can be set-up in real quick time to suit the needs of any of the emerging banking distribution models. Products and Processes can be set-up real fast without any major code change. MFRsolve for Microbanking combines the power of cloud computing and mobile computing. A browser on a desktop, notebook, tablet or smart phone is all it takes to use the system and it can be deployed as a cloud or Hybrid model.

Through our experience in microfinance, we developed MFRsolve for Microbanking that is adapted to the operational and processing requirements of banks and other financial institutions. MFRsolve for Microbanking features straight through processing and real time reporting. All transactions connect to a core accounting ledger that can be setup as a mirror to a bank's legacy core banking system or an external ERP or Financial Accounting system.

Gradatim offers MFRsolve on a transaction-pricing model that adds further value customers and reduces the implementation cost.

### A Quick look at the functionality

MFRsolve for Microbanking has been specifically designed as a configurable system – in fact most product and processes can be configured. There are also library of processes that can be used as part of a setup. It is close to being an out-of-the box system for most Microbanking products.

### The core system handles:

1. Customer, product and parameter settings, including charges and fees
2. Limits and collateral structure management
3. Information and reporting
4. Payment interface to Mobile, electronic, Smart card payments
5. Loan Products and Structured Deposit Products

Additional facilities specially built for Microbanking banking are:

1. Peer – or relationship based lending methodologies
2. Master configurator for gender, age and district of residence, all of which are cross validated during the loan application process to ensure applicants meet the criteria of the product
3. Exception-based payments and batch-payment processing
4. Contract and account based lending
5. Flat, diminishing or floating interest methodology
6. A rich Customer Information File for individuals and groups
7. Full suite of best practice standard portfolio reports
8. Funder tracking to report on fund management
9. Workflow processing and cash-flow reporting
10. A product designer the bank can use to create new products
11. Report and enquiry tools
12. Comprehensive charges and interest set up
13. Management of loans written off
14. Customer status tracking
15. Multi-language system

As banking requirements develop, additional modules can be enabled, allowing the bank to expand into new business lines, such as Islamic banking, money transfer or any other specialized market segment. Additional modules are available for collection, vaulting, cash management, regulatory reporting.

Gradatim provides a range of services including reconciliation support, query resolution and agent training.

### **An Architecture that is built to Scale**

MFRsolve solution is architected for scale and since the solution is built to run out of a data center or Cloud, banks can scale by adding servers or increasing the cloud instances – banks and non-banking-finance companies entering this segment can start small and expand as business grows.

### **Be the first to market**

MFRsolve architecture gives banks the ability to create new products rapidly. Because MFRsolve for Microbanking is configurable via parameters, financial institutions can customize new products internally and deploy them instantly without the need for development or testing of new code. The ability to get products to market quickly translates to real competitive edge in a rapidly changing sector.

### **A complete solution**

With MFRsolve for Microbanking, there is no need to invest in additional systems. It is a comprehensive front-to-back processing solution featuring real-time connection between all parts of the system, spanning transaction data capture, verification, delivery, position management and risk control.

Workflow is automated with straight-through-processing, although exceptions can be set. The connection of the front and field operations reduces the need for manual processes. In fact the system can drive the front-end staff through the process.

### **Easy to implement, manage and use**

MFRsolve for Microbanking is straightforward. As the system is pre-configured, typical implementation takes only weeks. In addition, users require minimal training, which reduces operational downtime.

MFRsolve is built on Microsoft stack. As a single technology stack, maintenance is easy.

### **Focus on the customer**

MFRsolve for Microbanking is customer-centric rather than product-centric. Customer information held within the core system enables a bank to categorize its customers. Users have a single view of customers, across all accounts and incorporating all transactions. Bank representatives can access detailed, up-to-date information when dealing with customers who, in turn, benefit from a more consistent and coherent service. It also enables banks to cross-sell additional products to existing clients and to attract new business.

## Deployment

MFRsolve for Microbanking is typically deployed in a data-center environment as a three-tier server configuration. It is also deployed on Microsoft Windows Azure cloud environment with SQL Azure or in a Hybrid model where the Web layer and Application layer is on Azure and Database is located within a data center.

User access is through Internet leased line and there is no need for a WAN setup. A typical deployment model is described below:

### Origination

- Delivered on Azure cloud
- Virtual / Branchless banking
- Active sync on mobile



### Secure transaction layer

- Powerful and configurable offline modules with tight controls on authentication and security



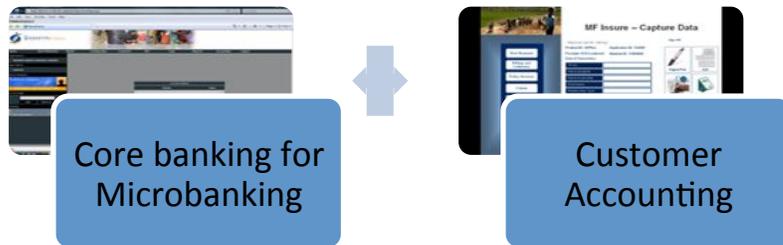
### Automated Processes

- Dynamic rules engine
- Automation and Standardization
- Configurable business process



### Business Services

- Clustered approach to banking / insurance
- Acquisition, rules based underwriting, servicing, payments
- Bundling of products
- Regulatory and compliance



## Product Specific Information

### A. Gold Asset Lending:

Process	Features	Unique Functionalities
Quotation and Scheme Module	<ul style="list-style-type: none"> <li>✓ Quotation</li> <li>✓ Loan-to-value in %</li> <li>✓ Max Loan Amt.</li> <li>✓ Dynamic Ornament list</li> <li>✓ Ornament Standard</li> <li>✓ State factor</li> <li>✓ Gross weight</li> <li>✓ Net Weight of Asset</li> <li>✓ Deduction of Weight</li> <li>✓ Eligible loan amount</li> <li>✓ Eligible Loan auto Display</li> <li>✓ Auto revised LTV based on loan required</li> </ul>	Simulation modeling to help convert prospect into a customer
Loan Acquisition Module	<ul style="list-style-type: none"> <li>✓ Customer Registration</li> <li>✓ Personal Details capture</li> <li>✓ Photo capture</li> <li>✓ Back ground check</li> <li>✓ Nominee Details</li> <li>✓ Contact details</li> <li>✓ Contact verification</li> <li>✓ List of saved application</li> <li>✓ Application Search option</li> <li>✓ Log details</li> <li>✓ Occupation based profiling</li> </ul>	Photo Capture, Intermediate save, Audit-trail, Waivers and deviations, External tele-verification, Bio metric capture, CIBIL check, De-duplication, Document capture and index
Loan Acquisition Collateral evaluation Module	<ul style="list-style-type: none"> <li>✓ Documents capture and upload.</li> <li>✓ Primary evaluation</li> <li>✓ Secondary evaluation.</li> <li>✓ Dynamic list of ornaments</li> <li>✓ Scheme selection basis Loan parameters.</li> </ul>	Ornament verification in different levels. Ability to build threshold limits to invoke secondary evaluation
Loan Acquisition Approval Module	<ul style="list-style-type: none"> <li>✓ Approval by authorized user</li> <li>✓ Optional editing of Application</li> <li>✓ Viewing of Application</li> <li>✓ Remarks option</li> <li>✓ Other charges</li> <li>✓ Approve / Reject</li> </ul>	Branch Manager mapping to multiple Jewel Loan Officers and branches. User privileges can be pre-defined
Customer Approval and Documentation Module	<ul style="list-style-type: none"> <li>✓ Auto generated upon approval.</li> <li>✓ Customer and Ornament details.</li> <li>✓ Individual ornament tagged to unique Asset ID</li> </ul>	Trail of evaluation, scheme, loan details and ornaments pledged
Loan Process Charges Module	<ul style="list-style-type: none"> <li>✓ Processing fee collection</li> <li>✓ Multiple Payment mode option</li> <li>✓ Auto display of charges</li> </ul>	Charges can be pre-defined, Instant Receipt, Short disbursement facility
Loan Disbursement Module	<ul style="list-style-type: none"> <li>✓ List of Customers for disbursement.</li> <li>✓ Search &amp; Select</li> <li>✓ Payment modes</li> <li>✓ Option of advance EMI.</li> <li>✓ Instant EMI Schedule</li> <li>✓ EMI Cycle</li> </ul>	EMI Schedule based on product features
Loan Repayment Module including Principal Prepayment and Foreclosures	<ul style="list-style-type: none"> <li>✓ Viewing Customer Details</li> <li>✓ Viewing Loan Details</li> <li>✓ Daily outstanding amount Calculator</li> <li>✓ Optional payment mode</li> <li>✓ Allocation type options</li> </ul>	View allocation and can do waiver of components, Triggers auto billing entry, Compatible to Holiday calendar maintenance
Payment Allocation Module	<ul style="list-style-type: none"> <li>✓ Allocation logic – Configurable which is through Allocation Configuration</li> <li>✓ Options for Default and Manual Allocation</li> </ul>	Configurable Allocation Logic, Manual allocation

	<ul style="list-style-type: none"> <li>✓ Waiver option</li> <li>✓ Can collect excess and Park it for future auto- Allocation</li> </ul>	
Ornament Part Withdrawal Module	<ul style="list-style-type: none"> <li>✓ Ornament part withdrawal</li> <li>✓ Current net worth details</li> <li>✓ Auto advise of amount to be paid</li> </ul>	Ornament part withdrawal upon part principal prepayment
General Ledger Module	<ul style="list-style-type: none"> <li>✓ Search option</li> <li>✓ Branch level search</li> <li>✓ Date Range</li> <li>✓ All account heads</li> <li>✓ Printable / Exportable</li> </ul>	Includes both system and manual vouchers.
Dynamic Report Module	<ul style="list-style-type: none"> <li>✓ Search option</li> <li>✓ Dynamic Reporting and choice of view</li> <li>✓ Date Range</li> <li>✓ Branch wise</li> <li>✓ Name &amp; Save the views</li> <li>✓ Printable / Exportable option</li> </ul>	Date Range, Customized view save facility, Printable & Exportable
Accounting Voucher Module	<ul style="list-style-type: none"> <li>✓ Search option</li> <li>✓ All types of vouchers</li> <li>✓ Date Range Query facility</li> <li>✓ Branch wise Search</li> </ul>	Date Range view, Printable & Exportable
Journal Accounting Module	<ul style="list-style-type: none"> <li>✓ Accounting entry</li> <li>✓ All types of voucher entry</li> <li>✓ Non-loan entry</li> <li>✓ Office expenses entry</li> <li>✓ Different a/c heads</li> <li>✓ Reference date &amp; no. Configurable a/c heads</li> </ul>	Manual voucher entries, Configurable a/c heads
Customer Dash Board	<ul style="list-style-type: none"> <li>✓ Dash Board - Graphic display</li> <li>✓ Status wise volume analysis</li> </ul>	Expandable summary, Pie charting