

## **Mahindra Finance** Mahindra & Mahindra Financial Services Ltd

**Category:** Enterprise Mobility

### **Background:**

**Mahindra & Mahindra Financial Services Ltd** (MMFSL) business model is socially inclusive and focuses on customers at the bottom of the income or social pyramids to grow by providing them loans based on their future earning capacities. It is also our continuous endeavour to develop skill sets at the local level.

In the earlier scenario, if one had to avail the loan, there was a need to go through multiple sets of manual processes requiring significant amount of time and paper-work. This task was difficult to track in real-time. Manual receipt-books were used by the collection task-force making it difficult to get information on daily collections and identifying the performance of the executives. Further, there was a risk of losing the books and hence critical data resulting in inappropriate collections. There was a need for a solution which could cover the major rural population of India and for a communication tool in which the customers could speak in his own language.

The key objectives behind the IT initiative are:

- To take entire business capturing application, collection, lead, document management on field right at customer doorstep in their own multilingual languages.
- Automization of Enquiry Lead Management & Loan Application processing using EMLAP/Bizconnect/Collection handheld devices which enables business capturing / Collection on field at customer's door step, communicating with customer in their own regional languages thus building eRelation using eParichay unique application.
- Solution that will enable quick decisions and make the Loan disbursement within 2 hours (as compared to earlier 2 days TAT) of Enquiry

### **IT initiative/Project: "Enterprise Mobility (EMLAP-Bizconnect-eParichay)"**

- Enterprise Mobility (**EMLAP-Bizconnect-eParichay**) initiative by BITS (Business Information Technology Solutions), it's constant endeavour to provide best-in-class services to its customer. Maps & addresses various business challenges using cost effective & affordable technology. Customer first, Customer centricity & Innovation are in BITS DNA since it's inception in organization. Effective usage of Technology is the Key differentiator & always distinguishes by exceeding customer service expectation by providing them best-of-the-class services by it's innovative in house developed tools & applications.
- It is in house designed, architected and developed on open source architecture environment under the leadership of **Mr. Suresh A Shanmugam** (Head-BITS [Business information Technology Solutions]), **Mr. Sundar R** ( Head-EATS [ Enterprise Architecture Technology Solutions]) & **Mr. A Khalid** ( Sr. Manager & Project Head – EATS), EMLAP-Bizconnect-eParichay are engineered together to connect & collaborate with Mahindra & Mahindra Finance's customers, organization & management seamlessly.

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- The IT initiative served the customers at their doorstep in their own multilingual languages, making the manual process of business capturing, collection, lead management and issuance of delivery order now completed within 2hrs
- All field processes are tightly coupled with well integrated dynamic universal business application called EMLAP (Enquiry Management and Loan Application Processing) improving over internal process efficiency of the organization.
- eParichay (finge print de-dupe) an innovative , path breaking , very unique and one-of-it's kind in NBFC & Banking Industry in INDIA, tightly coupled with bizconnect handheld device, voice, photo and video capturing.

Information collected on field is directly uploaded to server, credit appraisal team sitting at office can immediately disburse loan

- Application is written on dynamic concept and open source architecture environment  
Paperless Process helping environment & green IT initiative: EMLAP contains its internal Document Management System(DMS), Vazihthadam ( Customer Locater using Google Maps) for route maps definition, Business Hand held devices to capture data at source, Mobile apps to capture photo, record voice, Mail servers and Messaging tools, etc. thus making the entire process Paper Free and environment friendly
- It involves deployment of portable handheld, and working with Solar / Bike charger
- Automates Entire Collection Task force, Employee Conveyance Claim Process
- Direct monitoring of the field force possible from anywhere across the Globe. helped in eliminating duplication of data capturing efforts at Back-office, Minute by Minute MIS on Management Dash-board at Mahindra finance
- Customers in rural areas do not have any ID proofs; therefore the specified 4 fingerprints are captured for those who not have a valid ID proof and a finger print dedupe engine is integrated with EMLAP which checks if the entry is that of an existing customer
- Links with Graph applications to make quick and clear decision making on approvals, etc.
- Fully integrated with various existing applications and can be integrated to any new application just by simple configuration. Currently integrated with compliance , 2way messaging, MMFSL WEB, DMS Solution, Email, Photo gallery, fingerprint de-dupe, entity data de-dupe, CIBIL, existing legacy applications, multilingual correspondence printing, GOOGLE Maps, etc.
- Dynamic Business Application is fully configurable and 100 percent parameterized. Any dynamic business process can be configured on-the-fly. No development effort is involved for these
- Leverages the information to adequately plan business actions and maximize ROI
- Business entry including document scanning, photo capturing, voice recording and collection happens on the field at customer door step , information collected on field is directly uploaded to server , credit appraisal team sitting at office then disburses loan within 2hrs
- The customer can call a toll-free number to get the accounts information in his preferred language
- EMLAP's Deviation engine enables efficient tracking or deviations at each level. Any history of changes to move the case without deviations also can be tracked and there can be a separate mechanism defined to track these cases separately

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- If the employee at the branch wants to consult with the seniors at region or zone before FI approval or at any stage, a mail can be sent from EMLAP directly to the concerned. The reply from the concerned will get automatically linked with the application in the database
- In addition to this a variety of psychometric information related to the applicant, co-applicant are collected to facilitate behavioral analysis of any segment of customers
- Project reflects the true picture of Mahindra *Rise credo*,
  - ✓ Accept No Limits
  - ✓ Drive Positive Change
  - ✓ Alternate Thinking

Accept no Limits : Project is scalable till 'N' times hence it has no limitation for scaling.

Drive positive Change: Taking affordable technology to rural India right at customer's door steps)

Enables them to Rise

Alternate thinking : Bridging gap between rural India by alternate solutions & technology

- Technology involved:

Field Application:

- Mobile Lead generation
- Lead application assignment
- Business capturing,
- Collection,
- Biometric customer registering app
- Mobile Approvals
- are on Open Source
- C, C++, J2ME, Android and SQLite Database

Core Application / Financial Accounting:

- Core Business / Loan Application processing are Java called EMLAP (Enquiry management and Loan Application processing)
- Financial Accounting System is on Open Source (JAVA)
- Database: Oracle, MS SQL, MY-Sql, SQL Lite (for BHHD)
- Application server: Oracle web logic
- Customer / Internal / dealer Web portal: Net, MS-SQL
- Reporting / BI: MF\_Sanjaya - BI Tool, SSRS reporting and Web/Mobile
- HR Process (Payroll): SAP (integrated with M&M Group)

**Impact:**

- Paperless Process helping environment
- Improving over internal process efficiency of the organization

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- empowers MMFSL Business team with mobile technology thus accomplishing business processing tasks with minimum dependency, duplicity and lead time
- Since EMLAP contains its internal Document Management System(DMS) and other associated applications to facilitate the process, the entire process is paper free and environment friendly
- This open source solution enables business team to capitalize the rural potential via Mobility, using cloud computing in a secured network environment
- The solution collects adequate customer data (Biometric, Voice and Photograph) to handle operational risk and compliance and also be part of Financial Inclusion
- Total time taken for an entire process of loan disbursement has come down from 2 days to 2 hrs.
- Enables the direct monitoring of the field force anywhere across the Globe, helped in eliminating duplication of data capturing efforts at Back-office, Minute by Minute MIS on Management Dash-board at Mahindra finance
- Since Mahindra Finance has huge customer base in rural and semi urban areas where literacy is the biggest hurdle in communicating with those set of customers thru SMS, Posters and Pre Printed letters etc. To overcome this, Voice message was used, and in native language to overcome this hurdle
- The project was rolled out across 9000 users within a span of 3 months
- Data Quality improvement from 51 percent (CIBIL rejection rate) to 100 percent
- Eliminates duplication of data capturing
- Parameters like customer state, district, taluk and city/village are master driven and therefore best geography base analysis are made a reality at MMFSL vis-à-vis the earlier system where about 70 percent of the data were invalid thus making geography based analysis not feasible
- Scheme and Deviation performance analysis yields to betterment of TAT and customer servicing. 49K deviations recorded from 1.8K scheme
- Business got evenly spread across the period and month end volume had reduced to below 8 percent in Nov11
- Prior to Project implementation system was supporting nearly 18,000 to 25,000 number of new business cases booking ; Post implementation of project Dynamic new system is capable of booking 50,000 to 60,000 number of new businesses. Also it is 'N' times scalable. Revenue increased by 41 percent as of December 31, 2011
- Post implementation, savings on employee conveyance added to company's bottom line. Adoption of fully open source environment for application development incurs a saving against license cost of nearly 95% saving compared to closed environment system.
- After implementation of project following business challenges have been addressed:
  - Frequent market dynamic changes
  - Nonstandard process for NBFCs
  - Continuous Diversification process with new products
  - No hard and fast process flow can be adhered
  - Poor rural infrastructure in India (poor connectivity links, frequent, long, un-predictable power failures)
  - Rural customer portfolio (literacy and infrastructure problems)

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- Absence of any income proofs with rural customers
- Business commitment to see the earning capacity within the person
- Most of the employees from the rural locations and very few are skilled
- Avg. cash collection/day- INR 25 Crore Non-acceptance of cash at banks and huge cash collection charges
- Chances of high revenue leakage

Solution is BITS (Business Information Technology Solutions) constant Endeavour is to provide Best-in-class Services to its customer, maps and addresses various business challenges using cost effective and affordable technology. Customer first, Customer centricity & Innovation are in BITS DNA.

Effective usage of Technology is the Key differentiator & always distinguishes by exceeding customer service expectation by providing them best-of-the-class services by it's innovative in house developed tools & applications.

### **About the company:**

**Mahindra & Mahindra Financial Services Ltd** (MMFSL), part of the US \$14.4 billion Mahindra Group, is one of India's leading non-banking finance company with a pan India presence. Focused on the rural and semi-urban sector, it provides finance for vehicles and tractors and has the largest network of branches amongst NBFC's operating in these areas.