Banks and lending institutions need to be competitive in today’s lending environment in order to be in business. While they may endeavor to stay ahead with niche products, sustained marketing, effective customer care and efficient collection system, they can no longer depend on manual processes in their lending business. Geographical reach and brand loyalty can to some extent help them, but these are no longer the determining factors. It calls for efficiency in taking decisions, in servicing, in monitoring and in collecting.

Borrowers have the ability to borrow from their choicest sources and whenever they want. The institutions are realizing that the customers demand convenience apart from acceptable levels of interest. If a manager is not capable of processing a loan application within the least possible time, the customer has the choice to look toward others who can very well do so.

So, Indian banks and financial institutions are today following the footsteps of their global counterparts in automating their lending processes often using fully integrated solutions that cover the entire loan life cycle - from loan origination through loan application process, risk assessment, decision-making, monitoring and management control of approved loans. And what’s more, there are packages available in the markets which are customizable, scalable and implementable with the least interference to the existing automated environment.

Predominantly, these packages have: (i) risk management tools that help underwriters to automatically evaluate loan packages and give alerts on doubtful applications and evaluate the applicants in terms of liquidity, collateral and credit history; (ii) document scanning facility that enables digital storage and transmission of documents and that ensures integrity of the document throughout the loan life cycle; (iii) communication facility for managers processing the loan applications by exchange of notes through the system and even through dedicated email systems; (iv) workflow automation which facilitates flow of loan applications through various stages seamlessly and within timeframes; (v) monitoring system that takes care of repayment schedules and managing NPAs; and (vi) EMI reminders and default notices that are generated to customers from the system without the managers having to dictate such letters and notices.

**IN–HOUSE DEVELOPMENT**

Housing Development and Finance Corporation (HDFC), the prime lender in the country to home seekers, has a loan automation system in place and all the lending activities of the company are carried out through this system. “Our loan automation system is an end-to-end solution, starting with lead management to lead maturation, underwriting, disbursement, loan servicing and closure of the loan. It covers the entire loan life cycle - an average loan life of 10 years to a maximum of 30 years,” says R. Arivazhagan, senior general manager, Information Technology, at HDFC.

“It is a fully integrated system, and what is significant is that it is a home grown system and not a package we bought from vendors. We began work on it in 1990s as we found the need to automate loan processing in order to keep pace with the other automation processes that were happening in the organization. We consciously opted out of going for a package as such packages would require extensive customization in order to meet local requirements - basically legal. We worked on a next generation system and it evolved over a period of time as we went on adding modules and functionalities as we grew. For example, in older days, there used to be just one type of loans, that is, fixed rate loan. Now we have several, like variable rates, flexible rates, monthly rests, quarterly rests, etc. Similarly, earlier, there was no provision for generating credit reports to credit information agencies. These agencies have started functioning we need to offer reports...
about the creditworthiness of our customers and the system was modified to generate such reports. It is also enabled to have images.”

The system is configured to work both as a centralized system as well as a decentralized system. This is mainly because some of the company’s processings are carried out at branch levels. The system works on Oracle database which is run on an IBM AIX machine. The front-end of course uses Windows but developed using Oracle forms technology. NetApp is used as storage technology.

Union Bank of India is perhaps the only public sector bank to have fully implemented a loan automation system. The system takes care of, in the true sense of the term, the entire process of loans to customers - loan origination, processing, risk analysis, appraisal, servicing and post disbursement control. It enables personal and commercial lending. The bank’s officers function in a truly automated environment. The system is fully integrated with the core banking system and covers the entire loan life cycle.

LAPS

Says T.K. Srivastava, DGM - IT, of the bank: “We bought LAPS (Lending Automation Processing System) from a firm in Chennai, SysArc Infomatix. We then carried out the required customization. In addition, we have also subscribed to Crisil’s rating service in order for us to be able to evaluate the corporate customers. Wipro had been the system integrator. As far as I know, Union Bank of India is the only public sector bank in the country to have an end-to-end loan automation system. Every perceivable type of loan that is sanctioned by the bank is through the system now. We began work on automating the loan system sometime in 2007 and by 2008 December, we were online. Today, the entire process of loans - documentation to execution to monitoring to NPA management - is done through the system and all types of loans - corporate, SME, retail, personal, vehicle, agricultural, etc - are processed and serviced through the system. The system also helps in the recovery proceedings and generates EMI alerts, default notices and even legal notices. What is more, it has facility to have a list of approved lawyers and the bank branches have to mandatorily send the legal notices to defaulters through these approved lawyers. The system is available at all our branches and some 5,000 users can log on to it at any given point of time.”

Mahindra & Mahindra Financial Services, a non-banking finance company with a focus on the rural and semi-urban sector and which finances utility vehicles, tractors and cars, is using loan automation system in order to serve its predominantly rural clientele in a more efficient manner. “The system enables us to have swifter deployment of the existing business and new business,” says Suresh Shanmugam, national head - Business Information Technology Solutions of the company. “It also helps us to collect customer information in the rural areas and make it available across the enterprise so that we can be competent, we can extend our relationships with the rural customers and serve them more effectively and almost in real time,” he adds.

It is a centralized system, says Shanmugam. The information is captured through a distributed network of branches. There is a defined workflow which facilitates easier and quicker decision making. The solution had been customized over a period time with the required controls evolved and put in place to support the internal users to get accurate information.

REPORTS GENERATION

Bank of India is now in the process of automating its loan system. The bank too has just acquired LAPS from SysArc Infomatix and is about to commission it. When fully implemented, it will be an end-to-end and totally integrated system for loan management in the bank, says Saraswati Shankar, DGM - IT, of the bank. “We will also implement a rating system alongside,” she adds.

One of the significant advantages, according to Saraswati Shankar, is the facility in the system to provide reports of various nature to the Reserve Bank of India. “In the existing dispensation, we need to prepare these reports manually, which is a cumbersome process involving manpower and time. When the system goes online, the reports will be generated from the system, which can also be seamlessly transferred to the RBI without any manual intervention. In addition, we will be providing data on individual loans to agencies like CIBIL and we in turn, will be using the credit information provided by these agencies.”

She said the bank will be basically using the system for loan application processing, sanctioning, disbursement and monitoring.

Similarly, Vijaya Bank too has procured an automated system and is in the process of implementing it. The bank is customizing the package to suit its needs, both in the spheres of corporate and retail loan processing areas.

“The system is designed to capture details required for processing the loan proposal and it does support the tasks till sanction,” says Subhash Chander Kalia, executive director of the bank. “Once the loan is sanctioned, it has built in interface to create customer ID, open the loan account in the CBS system.”

Kalia explains that the bank offers loans for various purposes - agriculture, SME, exports, retail, housing etc - with variations built in as per the purpose and nature of loans applied for. “Applications in the system are designed to capture comprehensive details of the customer based on which a master is created. Ground rules are built into the system for online support at the appraisal stage and the system then gives triggers as to the eligibility of the customer. It has got high efficiency, largely due to its single point processing capabilities. However, delinquency is not captured in the system as it is basically for processing and sanctioning
of loans. The application does not cater to the full life cycle of the loan as it takes care of origination, fulfilment and opening of loan accounts,” he adds.

**PAPERLESS FLOW**

Thrissur, Kerala-based private bank the South Indian Bank has recently completed a ‘Credit Automation Project’, which the bank feels will improve its efficiency in credit processing and sanctioning of corporate loans. The bank claims that this is a ‘paperless flow’ of the loan sanctioning and is a unique process. Managing director and chief executive officer of the bank, V.A. Joseph said at the launch of the project that the bank will be able to expedite scrutiny of the loan application, appraisal and assessment of the limits with the help of ‘Loanflo’, the corporate loan solution software offered by LaserSoft Infosystems. “This will change the way the bank as a lender has been doing business,” he said, adding it will allow automation of the entire loan processing, sanctioning and tracking system for corporate loans.

The system of HDFC has a very efficient CRM functionality. Says Arivazhagan: “Our customers can log on to the system and trace the status of their loans. The system also generates year-end reports, certificates and statements of loans, which are mailed or couriered to the customers without their asking for it, to facilitate their tax planning.”

Arivazhagan says the system is basically a decision-aiding system rather than a decision making system. The data in the system helps a staff member in taking a decision. However, it is capable of assuming a decision-making system as well.

“In a business like ours, the most important aspect is to keep information in the desired structured format and make it available to the users in the right way at the right time. Automation is very relevant for such a requirement,” he adds, Srivastava of Union Bank of India says being a centralized, web-based system, it has helped the bank to make loan processing, sanctioning and monitoring fully system driven. Says he: “Each and every loan application will now have to go through the system irrespective of the nature of the loan. And across the bank, the terms and conditions are uniform, the rates of interest are uniform, the sanctioning modalities are uniform, securities sought are the same. It is totally transparent. Secondly, policy enforcement is very effective. Besides, the bank can revise policies and incorporate these into the system, which will then become effective across the bank. Thirdly, it has given a lot of confidence to the branch managers because it is ensured that the loan is sanctioned after fully meeting all the required formalities and fully following the set rules and regulations. Fourthly, the entire monitoring and recovery process is made very easy and efficient with the alerts given by the system for EMI payments, for defaults, etc. Even the managers are spared of the efforts of drafting letters to customers about EMI payments, about defaults, etc, and of sending legal notices as these letters and notices are generated by the system at the appropriate time. This drastically reduces the turnaround time. Fifthly, we can add any new products at any point of time and in pretty quick time and make it available across the bank. Finally, since the database is centralized, updating is done in real time.”

Srivastava says the system is capable of countering delinquency in an effective manner because of the automated monitoring that is possible. Arivazhagan too contends that the system is capable of providing analysis of customer performance and feedback. This can help the credit department in assessing fresh applications from existing customers, who will ensure that they do not default. It is just not possible to have these analyses in a physical mode.

**WORKFLOW**

Any typical loan processing involves decisions at different levels. How is information managed in such a situation? Srivastava says it is a workflow-based system. A loan proposal based on parameters set in the system can be decided by a branch manager, or it can if necessary go to a regional office or to the central office or to the board of directors. The concerned panel of bank officers can rate the application and record their views in the form of minutes and sign the minutes. This document is scanned and uploaded in the system. The application can be accepted and the loan sanctioned, or it can be rejected. The whole process is facilitated through a mailbox system.

“In case a particular loan is sanctioned in exceptional circumstances - we call it a case of deviation - there are provisions in the system to record the deviations to the parameters and have it approved by the concerned authorities,” he adds.

Kalia of Vijaya Bank says information flow is automated in the loan automation system, through workflow mechanisms.

“Automation does help in expeditious decision making as physical movement of papers is curtailed to a large extent.”

Does an automated system bring in efficiency through centralization and speed to the lending process?

Arivazhagan cites the instance of HDFC: “Over the years, we have recorded an annual growth of 25% to 30%, while the growth in our manpower has been insignificant. Secondly, our assets to expenses ratio is one of the lowest in the world, that is 0.4%. This is proven efficiency and this has been possible through automation.”

“A loan automation system is ideally an end-to-end integrated system, starting with lead management. In our case, even documentation is stimulated by the system, starting with collection and verification of documents, their safekeeping and their return to the customers upon completion of the loan tenure. The system generates MIS reports as well as compliance and regulatory reports for the regulator, in our case, the National Housing Board.”

Shanmugam of Mahindra Finance says surely the model...
enables faster decisions. The structured information available to the executives helps them take quick decisions. “We have developed the punch line do dimme badle din and this signifies the faster decision making prowess in the organization.”

The system is adaptable to core banking solution. Union Bank of India, according to Srivastava, has already integrated it with its CBS. Kalia says: “There is an interface between CBS and loan origination system for various types of lending. The system has good number of parameters/validations to take care of various compliance related issues.” Saraswati Shankar of Bank of India says the system will be integrated into the bank’s CBS.

DATA INTEGRITY
How is storage of data done and how is its integrity ensured throughout the loan lifecycle?

Srivastava says the system has strong access controls. Data inputting is based on maker/checker concept while documents are stored in PDF format. “Access control ensures that the integrity of data is maintained all throughout the loan life cycle,” he adds.

Arivazhagan too says in the HDFC system there is a very tight hierarchy-based access controls. The system is also protected through the usual firewalls and anti-virus systems. The customers are given user IDs and passwords to access the system.

“The data is basically in PDF files. However, I must say that compared to banks or mutual funds, our transactions are not huge. It could be just 15 transactions at the maximum per account. Hence storage is not a major issue for us,” he says.

Kalia says the system the bank has opted for uses SQL data base and security features of SQL database are used to ensure data integrity.

Union Bank of India is using a scoring system based on credit scores evolved by credit information agencies. “We also give inputs to these agencies as well as the RBI as per mandatory requirements. The reports are generated by the system and there is no manual intervention at any point of time. As I told you earlier, we subscribe to Crisil’s rating services and the rating of a customer is carried out in the system using the Crisil figures.”

Arivazhagan goes a step further and says HDFC’s system has a provision to predict possible payment defaults by borrowers. “We generate reports to credit information agencies based on the behavior of the customers.”

CHALLENGES IN MIGRATION
What have been the challenges for these institutions in migrating from a legacy system to the new system?

Arivazhagan avers that HDFC, even when it came to be established, had been a forward-looking organization. “There had been fairly large scale automation in the organization – like in accounts. As such, automation of the loan system was not a major challenge. Even employees were pretty ready and they undertook the migration in an effortless manner. We had made provisions for continuous training for them at various levels. At no point of time, we had any parallel system running. Again the roll over was done in phases, location by location and this also helped in creating an awareness and in training the staff appropriately.”

In the case of Union Bank of India, while data capturing in the manual system has been a difficult proposition, the bank had CBS in place and there had been no major legacy issues. “The database was available centrally,” says Srivastava, “and so it was a question of implementing the system and training the people to make use of it. We had a team of 113 people and we implemented the system in a phased manner with meticulous planning. We adopted training the ‘trainer’ method and this proved to be beneficial. In a matter of eight to nine months, we could train some 3,700 people across all our branches before the system was rolled out in December 2008. This has been a sort of record.”

Says Saraswati Shankar: “I do not foresee any major challenges in migrating to this system as the bank is very tech savvy and there is a CBS in place. Even training the people is not going to be any major challenge. LAPS will only strengthen our operations and business. All our branches will be covered by the system once implemented.”

For Vijaya Bank, though the existing loan processing mechanism is predominantly manual, Kalia expects the migration to be a smooth affair. The bank will undertake to give adequate hands-on training to the field functionaries.

Shamugam says even when having a manual system, Mahindra Finance had operated on a centralized model – data available centrally. “This proved to be beneficial for us when we shifted from a legacy system to a robust ERP system. This has enabled us from 2000 till today to have a full fledged system to seamlessly capture data from various locations in a centralized server and to make the data and information available at various required levels. This actually helped us to automate our loan system in a smoother and effortless manner.”

mohan@bankingfrontiers.com