

FinnOne™ Forecaster

Enabling A Proactive Loan Portfolio Management Approach



**NUCLEUS
SOFTWARE**

“Loan portfolio management technology can reduce pending credit losses by 35% and therefore, make the difference between a bank remaining liquid and failing.”

“Loan portfolio management technology also has the ability to improve revenue by up to 30% in some cases - for example, in credit cards by optimizing authorization approval rates, credit lines and marketing campaigns.”

“With an additional \$1.5 trillion in pending toxic debt (loans and derivatives), proactively identifying and preventing default, optimizing the treatment strategy of loans in distress, and accurately pricing asset-backed securities can make the difference between remaining liquid and experiencing bank failure.”

**Source: Gartner, “Loan Portfolio Management Could Reduce Pending Credit Losses by 35%”
Kristin R. Moyer, 5 Nov 2009**

What is Loan Portfolio Management ?

- Loan Portfolio Management is the process of setting framework, process, analysis and systems to generate the desired return from the loan portfolio on a continuous basis
- Loan Portfolio Management includes but not limited to
 - Establishing a framework of customer evaluation before granting any credit or Loan
 - Establishing a risk mitigation framework by ensuring effective collateral management , insurance & securitization activities
 - Promoting a predictive analysis approach to extract information / pattern and use it to formalize the 'Credit Policy' as per the risk appetite
 - Formalize a process of putting aside the Capital in line with the Risk to keep the Bank Liquid or not become Bankrupt
 - Formalize a process for continuous monitoring of the portfolio by establishing Thresh-Holds

Objectives- Loan Portfolio Management

- Reduce 'Loan Default' by using predictive analysis
- Formalize the 'Use of Credit Scoring' and reduce the individual bias from the loan decisions
- Build 'Effective Loan Pricing Strategies' based on customer behavior, payment history and segment analysis
- Formalize a 'Cash Reserve Management' framework for keeping bank operative and liquid
- Effective 'Credit Policy' for handling approval process , loan monitoring process, collateral management and risk mitigation process including insurance, sell-off, delinquency treatment and loan restructuring
- Effective 'Reporting Set-up' for Borrowers at Risk of Default, Borrowers in Default , Probability of Default and so on

Loan Portfolio Management - Themes

- **Credit Management**
 - Effective Credit Scoring system
 - Effective Monitoring & thresh-hold establishment
 - Effective approval and deviation matrix establishment
- **Portfolio Analysis**
 - Customer Segmentation
 - Controls Performance
 - Data Integration
- **Default Reduction**
 - Pre-Delinquency Management
 - Risk Bucket Movement and associated strategy
- **Distressed Loan Treatment**
 - Credit term modification like rescheduling, payment deferment , Foreclosure etc
 - Securitization
- **Stress Testing**
 - Prediction of default with change in macro-economic conditions
- **Cash Reserve Management**
 - Basel II approach for keeping Bank Liquid and operative

Loan Portfolio Management @ Nucleus Software

Loan Portfolio Management with Nucleus Software

- Our FinnOneTM Forecaster product is focused on Loan Portfolio Management
- Areas of application
 - Credit Scoring
 - Rules for Credit Scoring
 - Formulation behavioral scoring models
 - Delinquency Prediction
 - Pre-Delinquency Management
 - Risk Bucket Movement
 - Portfolio Segmentation
 - Risk Profiling
- Expertise in Lending Industry across multiple countries enable us to take the best risk management practices to our clients
- Availability of domain experts from industry enables us to take the client through a smooth transformation cycle

Components of FinnOne™ Forecaster

Business

Statistics

Data and Technology

Credit:

Delinquency

- Predicting delinquency
- Portfolio segmentation
- Risk profiling and management

Scoring

- Rules for Credit Scoring
- Formulation behavioral scoring models

Methodologies

- Decision tree
- Logistic regression
- Multiple linear regression

Parameters

- Descriptive statistics
- Correlation
- R Square
- Matrix algebra

Tests

- F-Statistics
- Wald's Statistics
- T-Statistics
- Chi Square test

Representations

- Misclassification matrix
- Lift and Gain

And much more.....

Versatile Data Handling

- Through data warehouse
- Transactional servers
- Through Excel uploads

Data Processing

- Data cleaning
- Data transformation
- Data validations
- Missing values

Integrates with Other Source Systems

such as Customer Acquisition, Loan Accounting and Collections

Others

- Secure environment
- J2EE platform
- Web enabled

FinnOne™ Forecaster- Data Analytics Tool for Lending Industry
Business Insights from Transaction Data through Analytics
Model Formulation, Evaluation and Prediction

...With You Until Success And Beyond...