

KastleTM
Secure Banking Solutions

Asset Liability
Management

KASTLETM Asset Liability Management - Formerly PINNACLETM

3i **Infotech**
Innovation • Insight • Integrity



Risk Management and Mitigation

KASTLE™ Asset Liability Management facilitates a number of risk measurement techniques to evaluate the risks faced by the bank.

Liquidity Risk management

Facilitates tracking down of cash flow mismatches and calculation of cumulative surplus or deficit funds at selected maturity dates.

Interest Rate Sensitivity

Highlights exposure to interest rate risk by grouping rate sensitive liabilities, assets and off-balance-sheet positions into the time buckets according to next repricing period.

Proprietary Gaps

A user does not have to be tied down to the standard Regulatory Gaps.

He has the choice to define separate gaps of his own choice for internal analysis and thus is able to analyze the same data with a different view.



KASTLE™ Asset Liability Management

KASTLE™ Asset Liability Management is a multi-currency Asset Liability Management solution offering a wide variety of powerful risk evaluation and analytical tools that enables strategic planning and decision-making. The tools facilitate measures for identifying, quantifying and monitoring of risks and thereby provide a platform for effective management of assets and liabilities, addressing both sides of the risk return equation.

Product features

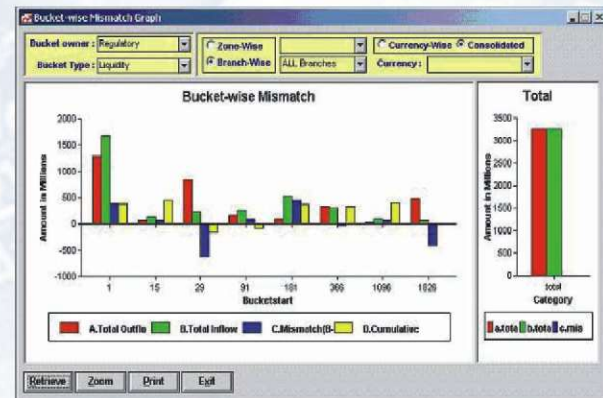
Data Management Features

ALM Gateway

KASTLE™ Asset Liability Management provides unmatched features to acquire data from multiple external sources, via Dataman / the ALM Gateway, and then validates and verifies the data that has been taken on.

Data Normalization

A translation utility has been provided for converting data extracted from diverse systems into a common format. Records having incomplete information from the ALM angle have to be identified and an acceptable treatment of such data is worked out.



Gap Analysis and Dynamic Gaps

While static Gap Analysis throws up, as of a particular day, mismatches in liquidity. Dynamic Gap Analysis is based on the reality that a bank's position changes dynamically in response to business needs. Dynamic Gap Analysis enables a definition of various scenarios, expected changes in assets and liabilities as on a horizon date, predicts their impact on bucket mismatches and calculates the impact on Net Interest Income.

Variance Analysis

Once the expectations for future are defined, at any point of time one can compare the targets set and the current status. Historically also, **KASTLE™ Asset Liability Management** provides for comparison of predicted scenario and the actual achievements.

Option Adjusted Gaps

While analyzing the static gaps some adjustments are required to be made in order to provide for the optionality, which is built into certain products such as term deposits. **KASTLE™ Asset Liability Management** facilitates defining of rollover and prepayment options and viewing the adjusted gap report which would provide a more realistic picture.

Duration Analysis

Duration Analysis makes interest rate risk assessment much easier than gap analysis. Instead of looking at numerous buckets, duration consolidates all the buckets of each instrument into a single number.

While Macaulay duration is useful in Immunization, Modified duration is an extension of Macaulay duration and is a useful measure of the sensitivity of a bond's price to interest rates movements.

KASTLE™ Asset Liability Management

provides both Macaulay and Modified duration analysis for the entire book of the bank / financial institution.

Duration also facilitates estimating the current market value of an instrument/ portfolio with the change in the interest rates.



By using convexity in the yield change calculation, a much closer approximation is achieved in price estimation.

KASTLE™ Asset Liability Management allows calculation of convexity and impact of the same on the market value of an instrument (pvbp) for change in the interest rate.

Pinnacle also provides Duration of Gaps, Leverage Ratio and Duration of equity.

Economic Value of Equity

This measure provides banks an insight into impact on value of equity on account of change of rate of interest.

KASTLE™ Asset Liability Management

provides measuring value at risk (of equity) on account change of rate of interest rates scenarios.

Mark to Market

The entire book of the bank/ financial institution can be marked off taking

into account the current interest rates. MTM in base currency with drill down facility, is available. Calculation of MTM, using FTP rates, is also supported.

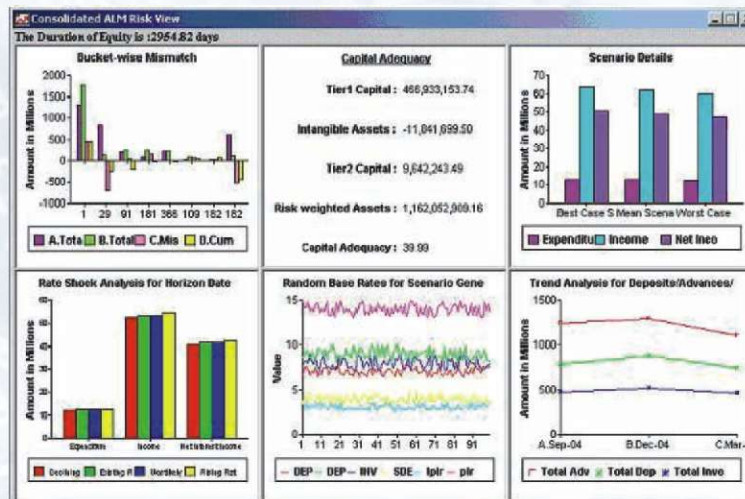
Sensitivity Analysis

Scenario Analysis

Advanced exercises in simulation and scenario analysis can be conducted to evaluate strategic alternatives. Income/ expenditure & Net Interest Income(NII) can be simulated under various scenarios generated using Monte Carlo, and a best, worst and mean scenario can be arrived at.

Rate Shock Analysis

Rate Shock Analysis can be used to study the impact of a change in interest rates on NII / NIM under stress / abnormal market conditions, based on existing rates, rising rates, declining rates and most likely rates.





Capital Adequacy

Apart from a mere reporting perspective, **KASTLE™ Asset Liability Management** facilitates measuring of capital adequacy that can be used to provide strategic direction in the bank's product mix.

Trend Analysis

KASTLE™ Asset Liability Management maintains historical data to view current trends, which can be used to predict the likelihood of movements in business volumes, deposits, advances, investments and other business parameters.



Funds Transfer Pricing

It is an analytical utility that assigns a market-based contribution value to each source and use of funds. Based on the underlying account or transaction attributes at the time of origin, FTP is the most comprehensive method for inclusion in an overall profitability measurement process. **KASTLE™**

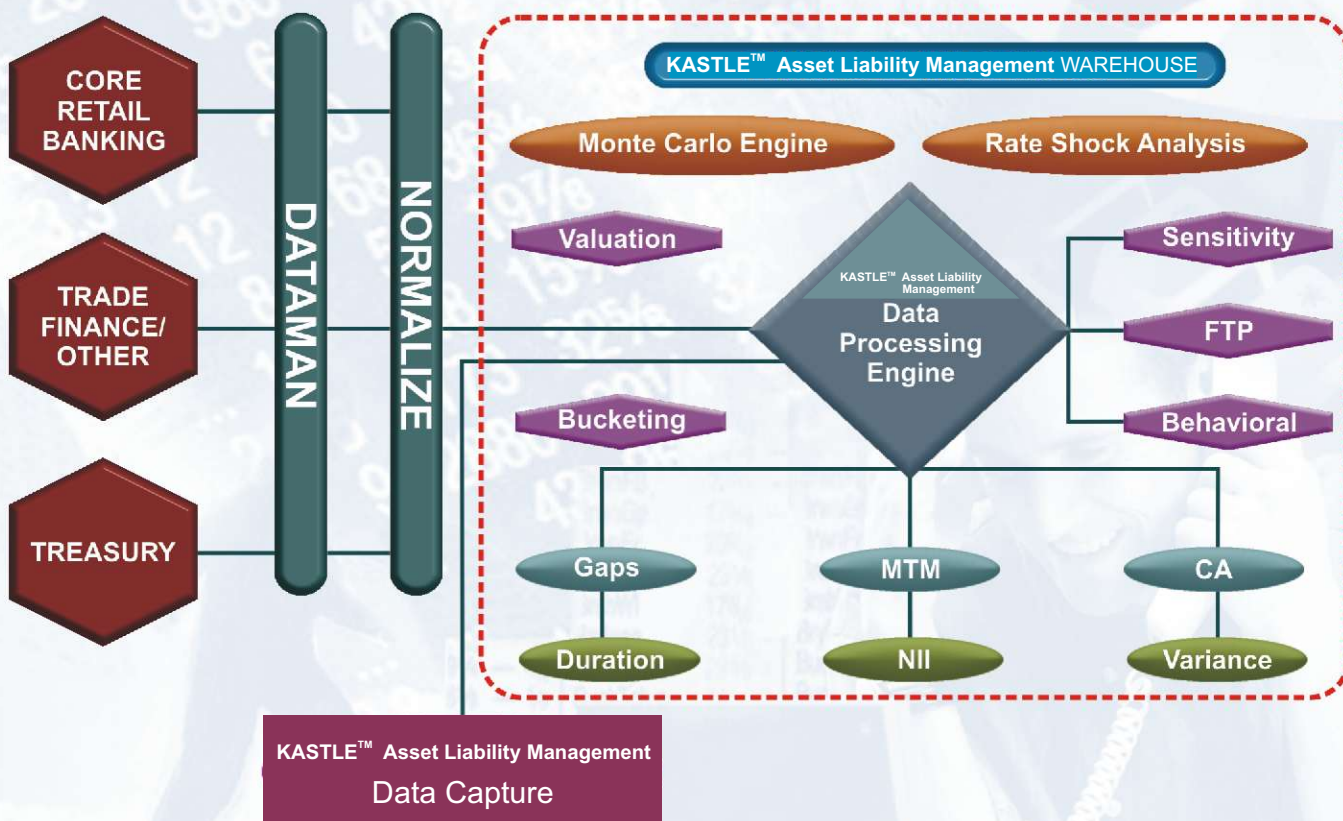
Asset Liability Management facilitates matched term funds transfer pricing along with other tools.

Exception Handling

KASTLE™ Asset Liability Management is equipped with a structure of user-definable alarms to throw up potential deviations in case of mismatches, cumulative mismatches, NII / NIM and Capital Adequacy.

Market Risk Measurement Interface

The solution has an interface with RiskFree, the risk engine from 3i Infotech, which provides the framework for monitoring and managing market risk. Alternatively, **KASTLE™ Asset Liability Management** can be interfaced with other third party risk engines.



Extensive Reporting & Querying

Reports are generated based on various tools which provide a framework for risk mitigation and control. A Query Builder facilitates analysis and generation of a host of MIS reports to formulate strategy and need-based alternative or remedial action plans. Queries can be saved and executed as and when required. The outcome of queries can be extracted in report formats also.

KASTLE™ Asset Liability Management provides flexible, user friendly reports that can be changed and customized using Windows-driven fonts and colors.

Parameterization

A high degree of parameterization allows the ALM product to be configured to suit the policies and conventions of the financial institutions, where the user has the flexibility to define a chart of accounts, classifications, sub-classifications, maturity buckets and reference rates.

Within the maturity buckets, the user has the flexibility to define separate time buckets for liquidity and interest rate sensitivity and for regulatory, as well as proprietary purposes. There is no cap on the definition of time buckets, and the time buckets can be redefined at any point of time.

The report formats change dynamically as per the time buckets definition.

In case of assets/liabilities, which do not have definite maturities,

KASTLE™ Asset Liability Management permits definition of core and volatile

components. It is also possible to define netting of requirements for selected assets/liabilities. The entire MIS can be generated based on currencies, or in the base currency of the user's choice.

Web-Enabled

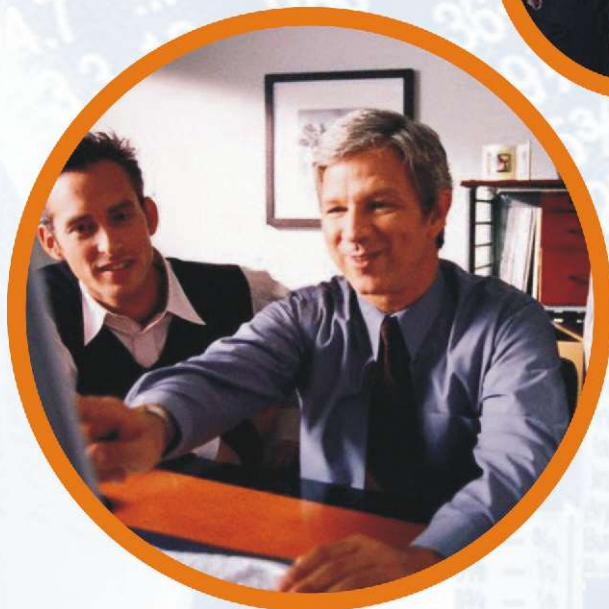
KASTLE™ Asset Liability Management is a browser-based interface to view critical MIS and analytical reports.

Security & Control Features

KASTLE™ Asset Liability Management follows standard menu security options by virtue of its design, which incorporates Login Security in the primary layer. The security features include option level access control, permitting users to access enabled features.

Technology

PowerBuilder has been used as the front-end graphical user interface, which makes operation a pleasure. The solution uses popular databases such as MS SQL Serve as the back-end.





About 3i Infotech

- Global Information Technology company providing Banking, Finance, Insurance, ERP and Technology related solutions
- One of the top 5 Indian software product companies*
- The fastest growing Indian software product company in 2004-05, with respect to both domestic and overseas software product sales*
- Winner of Frost and Sullivan Award for Growth Strategy Leadership for India ERP Software for SMB
- Winner of Asia Insurance Industry Award for Service Provider of the Year, 2005
- One of the top 3 ERP vendors in the Middle East & North Africa (MENA) region **
- SEI CMM Level 5 for its software services and ISO 9001:2000 for its Infrastructure and BPO Services
- Over 500 customers in 45 countries
- Over 2300 employees
- Offices in 14 cities across 9 countries in 5 continents
- State of the art development and delivery centres in Mumbai, Chennai, Bangalore, Kuala Lumpur, Dubai, New Jersey

* Source: Dataquest Special Issue: Industry Overview (July 15, 2005)

** Source: IDC report, 2005



E-mail: marketing@3i-infotech.com

Website: www.3i-infotech.com

USA | UK | U.A.E. | KAZAKHSTAN | INDIA | SINGAPORE | MALAYSIA | THAILAND | AUSTRALIA