INFORMATICA®

Informatica B2B Data Transformation for Loan Pools
Driving Accurate Risk Assessment for Asset Backed Securities

The mortgage business is currently facing crises in epic proportions: the rise in mortgage delinquencies and defaults has brought down entire financial institutions and has had dire effects on global economies. As a consequence, increased regulatory scrutiny has levied heightened requirements for greater accuracy in risk analyses.

Additionally the growing competition from a plethora of new entrants into the lending market has dramatically cut the time window to do thorough analyses as well as increased the requirement to rapidly introduce new products into the market. Mortgage lifecycles – from origination, to servicing, to sales on the secondary market – have been dramatically shortened while the need to run accurate evaluations at multiple points in the cycle has increased.

The sheer number of lenders and the many types of mortgage pools makes modeling and analysis of lending risks a data-intensive and arduous process in which manual intervention is almost always necessary. As a consequence, the industry's need to automate data collection and integration from many sources, normalize the data, and build risk models quickly challenges virtually every player in the mortgage lending business.

Technology Strategy for Loan Pools

A technology strategy based on a centralized transformation service that can help mortgage pool participants automate data acquisition and integration, streamline business processes, and expand collaboration within the mortgage lender network.

KEY MORTGAGE LOAN POOL CHALLENGES

- Time sensitive mortgage loan pool evaluations

- Increasing need for accuracy in analyses of mortgage pools

- High costs in manual normalization of data

- Increasing regulatory compliance and corporate governance

- Vast volumes of inconsistent data across disparate internal and partner systems

- Costly collaboration between business analysts and IT

A major bank required the integration of mortgage data obtained from mortgage providers into a unified format in order to facilitate mortgage analysis. The data provided was via Excel files with numerous worksheets, in a variety of layouts, and column names.

In order to analyze the data, the following needed to occur: normalization of column names and enumerated data fields, validation of data types and data formats, and business transformation rules applied against specified data fields. The bank needed the entire process to be performed by business analysts with the expertise required to conduct the data verification process with minimal IT intervention.

By using Informatica B2B Transformation, the bank was able to increase collaboration with all their mortgage provides, decrease the time to collect and normalize all their data, and integrate it to build their comprehensive analysis models.

Risk Evaluation in a Complex Industry

Traditionally, risk evaluation in the mortgage industry has been primarily based on traditional credit risk scores and database validation tools that compare application information and third-party data sources to identify data inconsistencies. The recent crises are driving needs for better risk analyses capabilities.

Complex Risk Assessments

When a mortgage loan is originated, the originator can choose to hold the mortgage loan, sell the mortgage loan to another financial institution as a whole loan sale, sell the mortgage loan directly into a securitization, or sell the mortgage loan to a mortgage conduit or loan aggregator, who in turn, may securitize the mortgage loan. Today's mortgage market consists of thousands of mortgage lenders that either securitize their own mortgage loans or sell loans to conduit operations set up to issue mortgage-backed securities (MBS) to capital market investors.

The loan pools for sale on the secondary market are analyzed and priced for sale to investors. The analysis of these loan pools requires many modeling techniques to calculate risks from prepayment and default as well determination of rating, yields, and returns. As there are many moving parts – prepayment, default, economic growth, home price inflation, demographics, etc – the capability to analyze the pool of loans can be immeasurably complicated and risky. Additionally, analysts do not have the luxury of time as loan pools often must be evaluated within a time window of 24-48 hours. As a result, analysts need to build robust models quickly.

Data Challenges in Building Analysis Models

Building robust models requires comprehensive and high-quality data to ensure that risks are managed. The biggest challenge is acquiring volumes of data from multiple mortgage originators and service providers, who often use Excel spreadsheets, and normalizing the data. Information from a variety of databases such as life insurance companies, banks, governments as well as details of all the mortgages within the pool also need to be included in the model to make the analysis as accurate as possible.

The process often begins with a business analyst identifying missing data, uncovering data which is out of range, and flagging any other data problems which will cause problems in the analysis of the portfolio. Much of this normalization process is performed manually which increases risk as data modifications can be untraceable and error rates increase under time pressures; 80% of the allotted time for analysis is often spent on manual normalization of data rather than actual analysis. Further complicating this is the increasing complexity of MBS as well as industry regulation such as Basel II for better risk estimation.

Informatica B2B Data Transformation for Loan Pools is designed to supply a centralized transformation service of disparate data with any-to-any data transformations. With it, mortgage firms can:

- Streamline data collection and exchange in B2B distribution channels

- Decrease core operational costs involved in the portfolio evaluation process

- Manage broad business channels

- Maintain control over business transactions

- Facilitate regulatory compliance and corporate governance and transparency

- Decrease loan pool analysis risk

Informatica B2B Data Transformation for Mortgage Loan Pool Evaluations

Universal Data Transformation of Mortgage Data

The recent rise in mortgage delinquencies and defaults has driven requirements for better analyses of Loan Pools. Underlying all analyses, however, is the need to begin with comprehensive and high quality data. Data needs to be collected from a variety of service providers, mortgage originators, and database systems. The data formats, contained predominantly in Excel spreadsheets as well as in Word and PDFs, must all be normalized to be included in the models.

B2B Data Transformation for Loan Pools supports any-to-any data format transformations all structured, semi-structured, and unstructured data in a codeless, reusable environment reduces the IT costs of custom development, validation, and error identification by automating access to all forms of data and thus streamlining intra- and inter-trading mortgage industry collaboration and integration.

Pre-defined libraries and out-of-the-box transformations using a meta-level approach as well as on-going monitoring and updates as necessary by Informatica Corporation to ensure the latest changes are included allows networks to immediately utilize the latest standards and specifications and lowers the cost to maintain changes or updates. Additionally, B2B Data Transformation includes pre-built frameworks that enable mappings between multiple versions of standards.

By enabling universal data transformations, B2B Data Transformation transforms large volumes of data into usable and normalized formats for analysis by risk management modeling systems.

Using B2B Data Transformation, mortgage organizations can:

- Define complex data transformations without the need to write code

- Immediately deploy and reuse transformations across the enterprise software infrastructure, preserving investment and promoting cross-enterprise integration

The Informatica B2B Data Transformation Advantage for Loan Pool Evaluation

The advantage of integrating Informatica B2B Data Transformation into the mortgage loan pool evaluations processes is that this single data management source enables timely and accurate mortgage data management at all times which in turn optimizes the use of all analysis modeling techniques. With this capability, enterprises can increase operational capabilities, automate data collection and normalization, and manage risk

ABOUT INFORMATICA

Informatica is a leading provider of enterprise data integration software and services. With Informatica, organizations can gain greater business value by integrating all their information assets across the enterprise. Thousands of companies worldwide rely on Informatica to reduce the cost and expedite the time to address data integration needs of any complexity and scale.

6851 (09/08/2008)