UNIFIED
MODELING
LANGUAGE™ ®

## SITUATION

An emerging SOA platform for the one of the largest Mortgage businesses maintained a flat data model with little ability to reuse or link concepts. Significant manual work was required to develop new schemas for web services, conduct impact analyses for data changes, etc. Additionally, there was no relationship between the SOA canonical model and the data warehouse integrated model.

## APPROACH

With the help of Model Driven Solutions, the SOA model was elevated into a logical model, known as the Common Model, using the Object Management Group UML® standard. The model was correlated to the Data Warehouse model and specific tradeoffs were deliberately made to bias the model to the industry standards of MISMO (Mortgage Industry Standards Maintenance Organization) and internal data models for key sources of record. This model was also extended to include non-Mortgage products, such as Lines of Credit. Additionally, code generation was built off the UML model. When a Data Integration Hub was built a few years later, the Common Model was used as the starting point for its canonical data model.

## RESULTS

The Common Model is now central to 700+ integrations across 100+ transactional applications for approximately 5 billion loosely-coupled web service transactions annually. The Data Integration Hub now mediates data across 34 applications leveraging the Common Model as well for canonical representation. This further allows for mixed architectural styles to be utilized to solve complex data and process integration needs while ensuring a high degree of data consistency.

This data consistency has resulted in up to 80% reduction in impact analysis of data changes, ability to support low and high latency analytics and extensions of reference and master data management across analytic and transactional use cases.

The Common Model has, therefore, allowed for a greater agility in meeting critical regulatory reporting needs from data across diverse systems of record, product changes and enhanced analytic capabilities to improve business operations.