

Case Studies in Reference Data

Challenges in rationalizing data across sources and business units

A DATA STRATEGY SERIES CASE STUDY

Information is powerful in business, but only if you can use it. Axis has helped some of the nation's leading companies make sense of their data and manage it effectively.

Introduction

Most financial services firms have at one time or another dealt with reference data issues, the most obvious of which are customer identification, householding, CRM, and Anti-Money Laundering. While these problems are largely understood, reference data management continues to plague these firms in other areas like product development, fee accrual, account servicing, revenue center accounting, and so on. Problems with reference data management affect a business' ability to identify opportunities, track progress, and provide services to its customers. Axis has helped its clients resolve their reference data conflicts and ambiguities, and has built the tools that manage some of the most complex data environments in the financial industry.

CASE 1 - Mutual Funds

Mutual Funds are conceived, developed, marketed, sold, and managed every day, with a large amount of reference data being generated at each step in the process. Tracking an identifier as seemingly obvious as a CUSIP becomes complicated when fund products and families are assigned test numbers prior to SEC registration, and when fund families are combined through acquisitions and mergers.

The Axis team delivered an application to manage the full life cycle of mutual fund reference data for a large banking and investment firm, including registration data, historical tracking of CUSIPs, and more. The application ties multiple data sources together in a unified tool for viewing and maintaining reference data.

The screenshot displays the 'Edit Ancillary Fund Information' page for 'XYZ Bond Fund'. It features a navigation bar with 'Mutual Fund Data/Admin', 'Revenue Reporting', and 'System Administration'. The main content area is divided into 'Primary Fund Information' and 'Ancillary Fund Information' tabs. The 'Ancillary Fund Information' tab is active, showing a grid of checkboxes for various fund types (e.g., 401k Daily Core Fund, SEI Fund, Proprietary Funds, Fund Source Fund, Plan-Specific Fund, BNY Fund, Comenica, Evergreen 401k Fund, DCX, Third Party Fund, Emerging Markets, USI). Below this is a 'Fund Details' section with fields for 'Unaffiliated CUSIP', 'FTU Symbol', '1989 Account Number', and 'Date Setup Completed'. A 'Restrictions' section includes checkboxes for 'Redemption Fee', 'Purchase Fee Load', 'Short-Term Trading Fee', 'Not avail. For Use in Retirement Plans', 'Minimum Purchase Amount', 'No Round Tripping', 'No Transfer', and 'Transaction Notification Required'. The page concludes with 'Save and View Updates' and 'Cancel Operation' buttons.

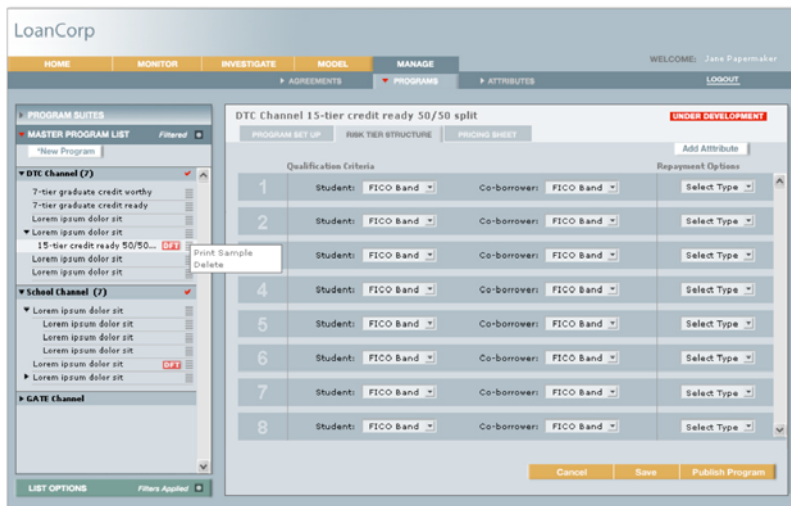
The screenshot displays the 'Modify Primary Fund Information' page for 'XYZ Bond Fund'. It features a navigation bar with 'Mutual Fund Data/Admin', 'Revenue Reporting', and 'System Administration'. The main content area is divided into 'Primary Fund Information' and 'Ancillary Fund Information' tabs. The 'Primary Fund Information' tab is active, showing fields for 'Fund Name', 'CUSIPs', 'Fund Family', 'Tickers', 'Agreement Covered?' (Yes/No), 'Fund Identifier Code', 'SOPE Fund Type', and 'Benchmark'. Below this is a 'Fund Details' section with checkboxes for 'Closed Fund', 'Closed to New Investors', 'Not Available to Trade', 'Eligible', and 'Late Day Traded'. The page concludes with 'Save' and 'Cancel Operation' buttons.

Management of Mutual Fund reference data can be complicated, involving historical reconciliation and slowly changing dimensions of data.



CASE 2 - Product Pricing

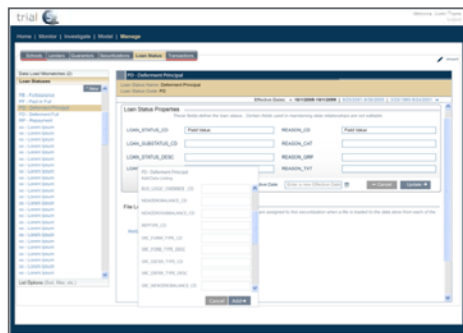
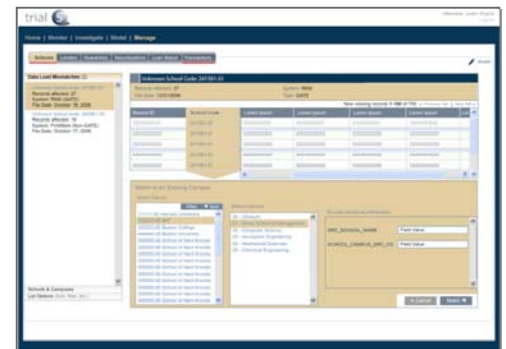
In 2006, a large student lending institution was pushing the limit of its legacy product creation processes. Based on spreadsheets and manual processes, and relying on a combination of Access databases and mainframe systems, the product strategy group was having trouble bringing new products to market in response to quickly changing conditions and borrower needs. They had to find a new way of creating, managing, and rolling out products and the complicated pricing and tiering mechanisms that drive them.



Axis designed and delivered a new product pricing application as part of a broader data strategy effort, providing the product strategists with a critical tool for rapidly responding to market conditions with innovative new products that were strategically aligned with the company's corporate revenue goals, and that also met emerging borrower needs. The application's structured data management features allows tracking of key data from product concept to origination, and all the way through loan servicing and repayment, enabling detailed analytics and profitability measures.

CASE 3 - Loan Servicing

If tracking and reconciling reference data internally is a challenge, managing data between third parties is a nightmare. The same student lending institution already described had encountered a common problem – how to handle changes and inconsistencies in account data when a third party is processing and servicing those accounts. Seven different loan servicers each handled data in their own ways, returning multi-format data files that lacked consistent unique identifiers. The client's ability to manually reconcile that data was well beyond the breaking point. Servicer records had to be matched not only to account origination records, but to product and pricing information as well.



Working directly with key subject matter experts at the client, Axis designed and delivered a system to automatically map servicer files to product and loan origination records, and an interface to handle exceptions in a fix-and-forget process. Once an exception is reconciled, the manual mapping is maintained for all future data loads, ensuring the record continues to be properly mapped without further intervention. The system allows data SMEs to focus on high-value activities like analytics and forward-thinking development, enabling the company to grow faster and more dynamically, instead of hunting down data discrepancies full-time.

In Closing

Axis has helped its clients solve some of the most complicated reference data management problems in the industry. The process, tools, and experience we bring to each of our projects have made us preferred partners for reference data solutions among our clients.

