

Research Analysis Support System for a Leading Russian Bank

Client

One of the top three largest banks in Russia

Business Area

Market analytics and research

Asset Classes

Equities, Fixed income, Indices

Technology Set

.NET 3.5: ASP.NET, WCF WWF, SMTP, AJAX, XSLT/XML, MS SQL Server 2005

Integration

SOAP 1.2, SMTP Pooling, SOA over WCF, Message Queuing

User Profile

Research Analysts, Compliance, Editors, Desktop Publisher

Geography

Moscow, London

Relationships Status

Ongoing, Fixed Price

Services Provided

Full cycle: Business analysis, Development, QA/Testing, Maintenance

Team Size

12+

Duration

2+ years development and ongoing enhancements

Summary

Develop a comprehensive, intelligent database to support the bank's research department in market data analysis and the publications workflow.

Business Challenge

In 2008, the bank began an initiative to build an in-house market research and analysis team. To support the new department, a solution was needed for:

- A comprehensive database of equities, bonds, currencies, indices, company financial indicators and more
- Automated import of market data from the MICEX and RTS exchanges and the Bloomberg agency
- Automated distribution of calculated market analysis data and reports to research analysts and other company subscribers via email, as well as online, on-demand reporting

Luxoft Delivered Solution

Luxoft delivered the initial system on time and within the budget and new capabilities continue to be added as requested by the bank.

Luxoft's market research database (RDB) was designed and populated with 10 years of historical market data and is automatically updated daily with current market information from financial information providers and stock exchanges. A wide range of standard ratios and parameters (i.e., yields, durations, spreads, yield curves, P/E, ROE, and MCAP) are calculated with configurable models and algorithms. More than 40 types of market data analysis reports are compiled in both Russian and English, with automatic distribution to company subscribers.

Key business functions include market data management, data analysis, client or subscriber management, publication workflow governance, distribution management, and importing market data.

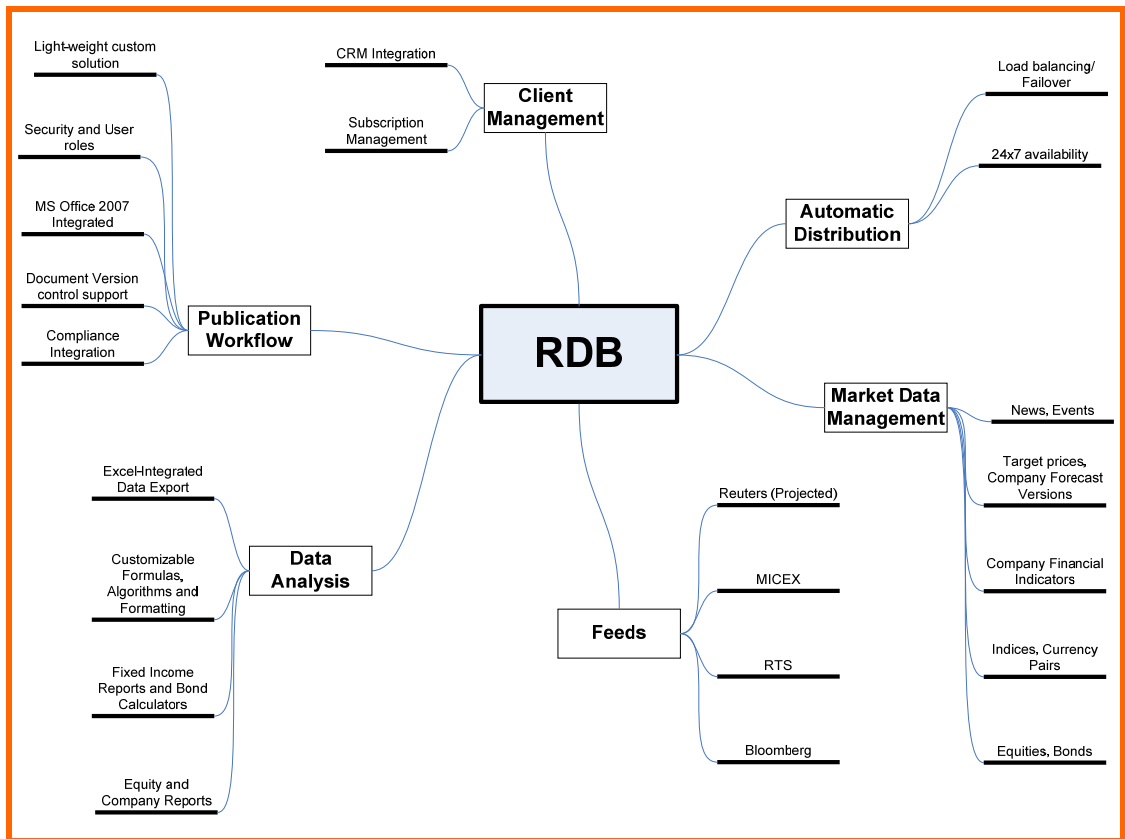


Figure 1: Research database functional framework

Future functionality will include improvements in publication workflow, document authoring, on-demand publications from ready-to-use calculated data blocks, additional analysis parameters in the Fixed Income analysis block, and development of an Internet Research Portal.

Luxoft's solution uses an n-tiered, layered architecture for maximum stability and flexibility. Functional capabilities are supported by four main components: email distribution, document storing, publication workflow, and market data imports.

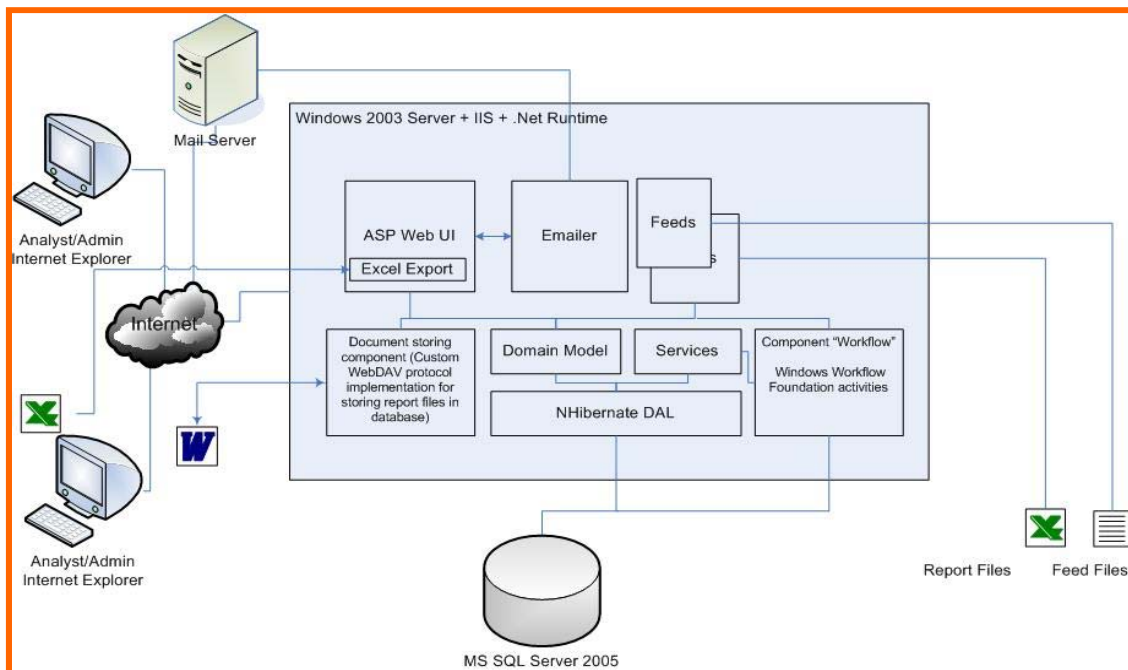


Figure 2: Research database solution architecture

Emailer Component

This component is dedicated to meeting the email distribution requirements. It is designed to interact with multiple SMTP mail servers for failover purposes and can be dynamically configured. It also includes notifications for system health other types of alerts.

Document Storing Component

Documents in the system are stored in database. Access to documents provided via custom implementation of WebDAV protocol.

Publication Workflow Component

The publication workflow component governs the distribution of the research department's analytical report documents to subscribers. The workflow uses the Windows Workflow Foundation (WWF) technology to schedule and execute publication activities and to manage the external data exchange.

Market Data Import Component (Feeds)

This component is responsible for parsing, transforming and uploading market data feeds into the database. The data feed import process is optimized with centralized error handling, detailed logging, and load balancing routines.

Benefits

With Luxoft's technical expertise and advanced business domain knowledge, the bank realized the following benefits:

- Improved the quality of the analysis and interpretation of market data, facilitating better strategic and tactical decision-making
- Reduced risks with improved governance of best-practice compliance and improved data quality
- Added benchmark capabilities with 10 years of market history
- Increased productivity with automated distribution services

Customer Feedback

Detailed feedback is available upon request.