

Order Management System for Equity Derivatives

Client

A top ten global investment bank

Business Areas

Multi-asset class trading, order management, front office

Asset Classes

Equity derivatives

Technology Set

Java SE, Swing, Spring, Hibernate, Tomcat, JMS, Tibco EMS/Rendezvous, IBM MQ, RMI, REST, SOAP, FIXML, XSLT, Sybase, Oracle, JUnit, Shell scripts, TeamCity

Integration

Markit Wire, RFQ-Hub, pricing tool, client's data source, ETD/BClear source, Underlying source, risk database, ETD settlement system, revenue calculation service, authorization audit service

User Profile

Sales managers and traders (40+ users)

Geography

Europe, Japan

Relationships Status

Ongoing ODC, T&M

Services Provided

Full cycle: Business analysis, Development, QA/Testing, Maintenance with Production support

Team Size

Five team members

Duration

1 year

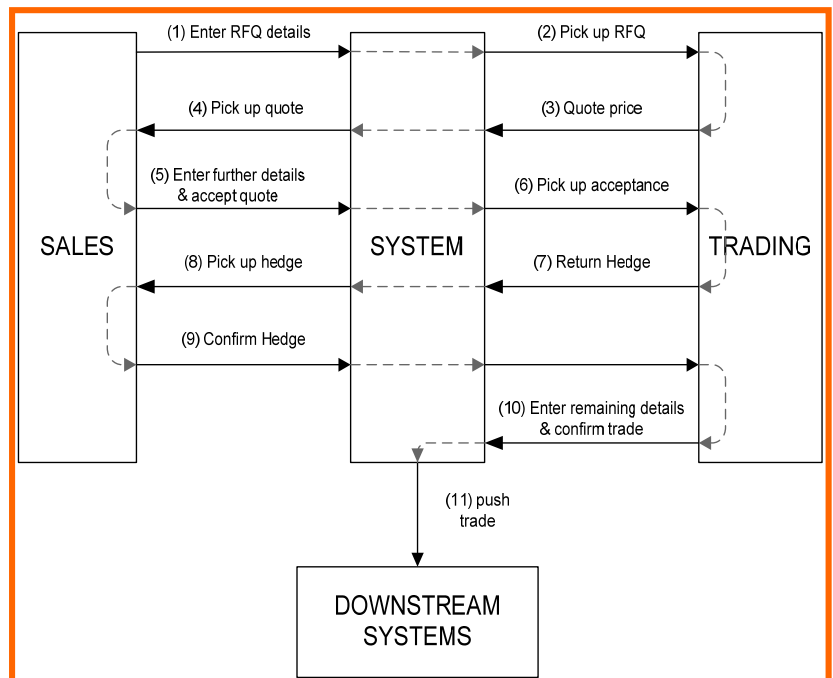
Summary

Develop a pre-trading order management application that supports over-the-counter (OTC) and exchange-traded derivative (ETD) contracts, provides management information related to the trades, and facilitates straight-through processing (STP).

Business Challenge

In order to take advantage of cost savings and process improvement opportunities, a global investment bank elected to automate its pre-trade order management and negotiation workflow. The system must be designed for use by sales managers and traders to support OTC, ETD and BClear trading using a variety of options and swaps, including vanilla options, combinations, options spreads and variance swaps. The high-level requirements for automation included order entry, price negotiation, hedging, and maintenance of all data attributes required to support straight-through processing.

Figure 1: Pre-Trade Order Management and Negotiation Workflow



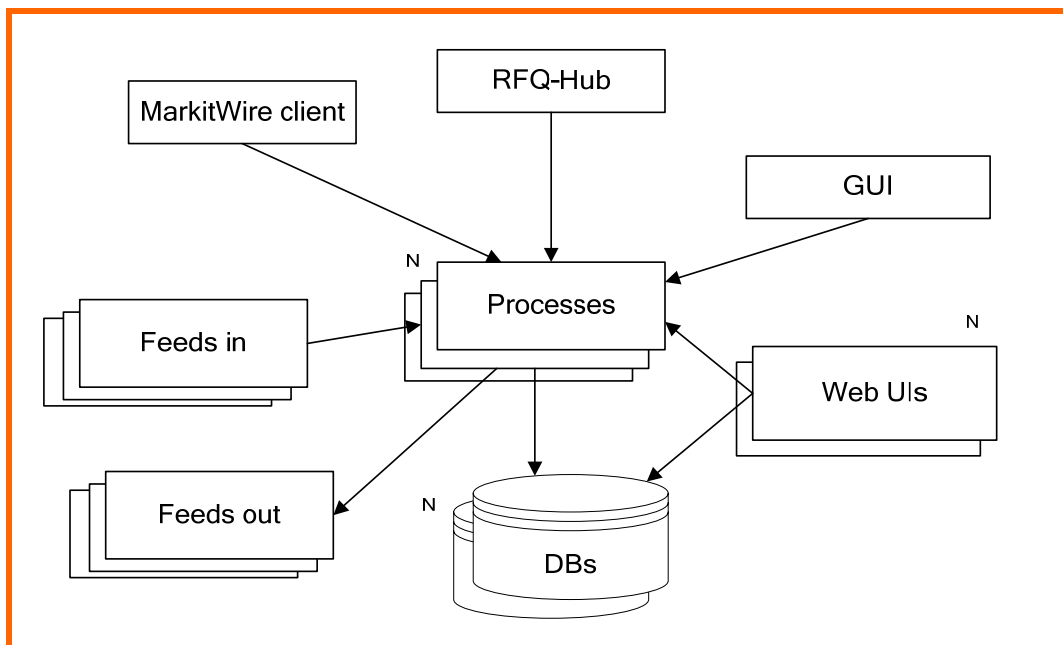
Luxoft Delivered Solution

Working in close collaboration with all stakeholders, including third-party representatives, the Luxoft development team collected requirements, analyzed the gaps, and established the approach for controlling the project lifecycle from

requirements specification to application deployment. To ensure the highest quality product, the Luxoft team organized continuous, regular communications with business representatives to maintain current priorities, verify functionality, and raise visibility to the project status.

Luxoft's development team designed a system that met all of the high-level requirements of the business and exceeded expectations by rewriting several legacy system components, performing technical migrations, and upgrading third-party application interfaces. The application is seamlessly integrated with multiple internal and external systems, both inbound and outbound. In addition, the system supports dedicated reconciliation processes with reporting to facilitate the identification of missing, invalid or incomplete data.

Figure 2: Pre-Trade Order Management Framework



Luxoft designed a solid and stable distributed system framework built upon multiple Linux and Solaris boxes. The system employs thick-client architecture to exploit opportunities for rich functionality in negotiations and hedging. The server-side processes are based on Java technologies to gain the cost saving benefits of portable, reusable code. Middleware services, based on RESTful, EMS, IBM MQ and RMI technologies, increase the level of service for transactions in a secure manner. Lastly, integration between the bank's internal and external applications was designed using XML over EMS, FIXML over EMS and SOAP technologies for maximum flexibility in a variety of message protocols.

Benefits

By establishing a sound project approach and a culture of transparent communications, Luxoft was able to deliver the application on time and within budget.

The new order management system has remained stable, without unscheduled outages, thus substantial decreasing operating costs and avoiding the incremental costs of unscheduled downtime.

The automated workflow provides the benefits of improved productivity, increased compliance, greater agility in trading, and the costs and revenue benefits of process improvement.

Customer Feedback

Detailed feedback will be provided on request.