

## Commodities Pricing and Risk Management System

### Client

Top 10 Global Investment Bank

### Business Areas

Trading, Risk Management, Pricing Analytics,  
Position Monitoring, Market Data and Exchange  
Connectivity

### Asset Class

Commodities

### Technology Set

Openlink Endur, Oracle, TIBCO Rendezvous, IBM  
MQ Series, C++, J2SE, J2EE, JMS, Crystal Reporting

### Integration

Reuters, LIM, SWIFT, NYMEX, ICE & Globex trading  
gateways

### User Profile

Front Office, Middle Office and Operations (3000+  
users)

### Geography

US, EU

### Relationships Status

Ongoing ODC, T&M

### Services Provided

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

### Team Size

10 team members

### Duration

2 years

### Summary

The bank's front office, middle office and operations department use the system for trading and risk management in the field of commodities.

### Business Challenge

The client's corporate and investment banking (CIB) business faced the challenge of managing trading transactions across multiple commodity markets affected by significant volatility in energy prices, the emergence of electronic trading hubs, and new regulatory requirements. The bank's existing transaction management system had limited functionality and could not effectively support the business needs.

Facing tight deadlines to enhance the system and lacking IT resources, the bank was looking for a partner with the domain knowledge, technology expertise, and a capacity to provide a secure development environment.

The bank was also looking for resources experienced in OpenLink technology. The primary business goal was to significantly decrease timeout between the requests of new features and enhancements for OpenLink system coming from application users and the implementation and delivery of solutions without compromising quality.

### Luxoft Delivered Solution

Luxoft began development of the solution, meeting stringent requirements for data and IP protection in the established for the bank offshore development center.

The platform's new functionality enabled the bank to manage transactions across multiple commodity markets including Crude Oil and Refined Products, Electricity, Natural Gas & NGLs, and Coal. The solution supports both exchange-traded derivatives (ETD) and over-the-counter (OTC) instruments such as futures, options (vanilla and multiple exotics, including Asian, Digital, Barrier and many others), option strips and swaps.

The services provided by Luxoft included:

Implementation of additional functionality in a Transaction Management system:

- Pre-processing of deals (including deal verification)
- Post-processing of deals
- Reporting

The new Transaction Management system includes the following enhancements: custom deal entry screens, custom validations, credit/risk checks, generating of SWIFT messages. The system interfaces to commodity exchanges, market data vendors, accounting and settlement systems, as well as to any custom application on the client side. The solution supports multiple exchanges including ICE, NYMEX, Globex and CME.

Quantitative and analytic services:

- Incorporation of custom pricing tools and calculators
- Development and integration of proprietary and/or third party valuation models.

Development and integration of a sophisticated position keeping and risk reporting solution:

- Open position and trade reports
- Realized, unrealized and historical profit & loss (P&L) statements
- Mark-to-market (MTM) value reports
- Greeks and Greeks distribution reports
- Cash flow and settlement reports
- Trade tickets and confirmations
- Invoice/Billing reports
- Custom document forms
- Other analytical reporting

## **Benefits**

The bank received an advanced solution to support commodity trading that was delivered on time and within the budget. The system is a powerful application for energies trading reinforced by a robust platform that brings unparalleled advantages to trading, risk management, operations professionals.

## **Customer Feedback**

Detailed customer feedback will be provided on request.