

Case Study 1: Global Investment Bank – Risk Portfolio Management - FRTB

Scope

The client needed to quickly ramp up the Analysis workstream of its FRTB programme to be able to run Quantitative Impact studies and assess the business impact of the FRTB regulation. Adsatis was asked to provide a team of consultants who had experience in FRTB and a combination of SME expertise across all asset classes (Equities, FX, Rates, Credit) and quant analysis skills.

Methodology

Adsatis team of professionals, working at client location, executed the program. Key deliverables included:

- Updating and enhancing inventory of inputs into QIS and help to build dependency tree with owners and timing information in order to assist with planning of future QIS and in particular to be able to identify data and processes that prevent more frequent and timely delivery of QIS results
- Developing rules to validate input data and intermediate results coming from QIS calculation process in order to get early warning of data /system related issues or inconsistencies so that these can be addressed as early as possible in the QIS production process
- Developing or enhancing processes to determine supplemental data required for QIS that is not part of the current market risk framework e.g. specific FRTB required market and sector information, risk factor categorisation
- Validating changes to the book hierarchy and determine which books to include in the QIS reports to support required analysis
- Comparison of VaR and stressed VaR from current VaR model (monte carlo based) and hist sim VaR

Benefits to client

- Enabled our client to ramp up quickly and meet internal deadlines
- Provided team with existing knowledge and relevant experience
- Enabled our client to get a good understanding of the impact of FRTB and to 'educate' the business and senior management on this

Added value to client

- Provided FRTB expertise and business credibility to secure effective engagement across all teams
- Secured effective engagement with key different functional areas ie front office, market risk managers, portfolio risk management
- Flexible solution – supported transition to permanent staff as they were recruited

Case Study 2: US Based Global Bank: Risk Portfolio Management System Integration

Scope

The bank had an excel based application, used to record & manage trades that it was undertaking to hedge all investments that had associated uncovered credit risk. Apart from this, the bank was also using this application for recording trading related to fixed income securities. One of challenge of using this application was about data security & audit control, the other was seamless integration of trade and risk data with the core risk engine to get consolidated view of risk across the entirety of the bank's portfolio.

Methodology

- ODA recommended and built an application on a centralized application server that migrated data to an industry standard RDBMS
- Client applications communicate with the centralized application through a messaging server.
- As a first step, the standalone application was converted into an enterprise-wide collaborative platform with shared real-time data stored in a relational database with minimal impact to the user experience and implemented reporting functions using standard reporting tools
- As the next step, the application was enhanced with a GUI (while continuing to support the excel interface) and with authentication, authorization, and audit trails
- Technology used : Java Messaging J2EE Application server, ORM persistence tool Hibernate 3, Database server (Oracle), and Actuate Reporting tool

Benefits to client

- Consolidated Portfolio risk summaries (credit & market) at the desk and bank level
- Real-time data sharing
- Security and audit control
- Data workflows
- Centralized and automated reporting

Added value to client

- In-depth knowledge of the financial industry specifically trade execution, pricing and portfolio management
- Optimal technology architecture offering distributed scaling, security, authorization and audit control with performance
- Ability to deliver cost-effective solutions
- Adherence to strict deadlines