Broadridge Case Study:
European Custodial Bank

Broadridge

Client Case Study - European Custodial Bank

Broadridge's client is a Europe-wide custodial bank. In 2008, the bank was an established single-site Broadridge user for principal securities lending and borrowing, and repo. In addition, the client had recently installed the Broadridge Xpose Collateral Management solution for collateral management in securities lending and borrowing.

Background to the Project

The bank was acting as the collateral agent on behalf of its lenders' CSAs. To support this, it required a technology system for CSA collateral management. The client was looking for a solution that would give it control over legal terms, margin call valuation disputes, collateral eligibility, haircuts and concentration schedules.

Broadridge's client had recognised the emerging trend towards centralising collateral management across business lines. It wanted to achieve the benefits of consolidating its siloed collateral usage for derivatives, securities lending and repo into a single central collateral desk.

The client also wanted to evolve the collateral function from the middle and back office to a full front to back office process. This would see collateral usage taking on an increasing front office focus as traders became more aware of risk control and collateral usage costs in the wake of the financial crisis.

The Selection Process

At the time, there were no technology solutions available in the market that offered this cross product, front to back office support in a single solution.

The client evaluated three mainstream derivatives collateral management vendors. It concluded that the vendors offered less functionality for Securities Lending and Repo collateral management than Broadridge.

The client also had a preference for using a single integrated solution rather than separate systems for derivatives and securities lending/repo. The client therefore asked Broadridge if we could develop support for CSA collateral management in the Xpose solution.

This resulted in a collaborative approach with the client that enabled Broadridge to develop a customized solution that closely matched the client's unique business model. Broadridge's long standing relationship with the client and quality of customer support were also a key part of the decision to build on Broadridge's existing functionality rather than implement another vendor solution.

Project Phase 1: Bilateral CSA Margin Management

Through working with the client using real CSA examples, we developed a workable, cost-effective plan to extend the functionality of Broadridge Xpose to meet the client's needs.

This included new modules supporting:

- CSA eligibility schedules
- Haircut schedules
- Thresholds
- Dispute management
- Interest payment schedules
- Margin call workflow

We agreed, designed, and implemented the project on time and on budget. This was at a significant cost saving compared to bringing in one of the alternative collateral management vendors.

The Benefits

The project allowed our client to consolidate its entire collateral management operation into one system. This generated significant cost savings and eliminated the need to work with two separate vendors and integrate solutions. Broadridge Xpose has also helped the bank to closely monitor the quality, diversity and spread of its collateral from the outset when launching its CSA collateral business.

Project Phase 2: Automated Bilateral Collateral Allocation and Optimization

Following the successful implementation of the client's CSA requirements, in 2009 the client asked if we supported automated allocation of collateral. At the time, the bank was using a legacy mainframe system with poor usability, lack of scalability and high maintenance costs.

Importantly, the mainframe solution did not incorporate any 'what if' simulations of intra-day collateral allocations. As the client was familiar with Broadridge Xpose already and had been happy with the earlier implementation, its preferred option was for Broadridge to develop the extra functionality it needed.

Requirements

The bank wanted to re-allocate all bilaterally received, non-cash collateral from its central collateral pool to its hundreds of underlying client collateral accounts.

The bank identified two ways to achieve this: The first option was as a simulation - to model whether the pool contained sufficient eligible collateral with appropriate concentrations. The second option was as a bulk allocation of collateral movements.

The aim? That all of its clients were 100% collateralised, in line with appropriate eligibility, haircuts and concentration limits, in the most cost efficient manner.

The Project

The Broadridge collateral system already supported complex algorithms. This process is key to the correct modelling of agency and matched principal stock loans and repos. We therefore used this knowledge to design and build a sophisticated algorithm to the client's exact specifications.

We delivered the four month project into production on time and within budget. This project allowed the bank to extend its single-system collateral management and optimization operation even further into one solution.

As a further phase of this project, Broadridge also developed algorithms to allocate the client's tri-party collateral to its underlying lender accounts.

The Benefits

The client was able to:

- Reduce costs
- Optimize its margin calls
- Deprecate its old system

Project Phase 3: CCP Margin Finance

The bank acts as General Clearing Member (GCM) for a range of domestic/international clients that trade over a single or multiple cash equity platforms. The bank has asked Broadridge to extend our collateral management system to automate and optimize the CCP margining it provides to its custody and clearing clients.

This involves financing the bank's clients with cash equity trading activity via a range of Central Counterparties (CCPs). The client wanted to improve this process and move away from its mainframe system.

Requirements

Our client's objectives in this field were as follows:

- Calculate each of its own clients' CCP margin requirement and any subsequent funding requirement across each CCP
- Automate the current CCP pledging process
- Provide greater client transparency
- Make better use of pledged assets
- Enhance risk mitigation
- Expand the collateral pledge process to manage non-cash collateral pledges by the bank acting as general clearing member to the various CCPs. This limits the current liquidity drain and use of finite resources such as balance sheet when undertaking third party financing
- Provide a billing tool for the bank to bill its clients for general clearing collateral services
- Optimize the potential returns from the mismatch between the gross/net exposures with each CCP, the collateral received in by the bank's clients and the collateral pledged out to each CCP on clients' behalf

The Project

This project will enable the bank to use Broadridge to manage its Securities Lending & Repo borrower collateralization, client-side collateral allocation/optimization for both bilateral, triparty and the bank's GCM obligations to CCPs on behalf of its cash equity exchange clients in a single system. The bank will also make use of a tactical solution for CCP messaging within Broadridge that forms the basis of its future GCM EMIR support.

Conclusion

Through use of the Broadridge Xpose collateral management system, the client is now able to manage credit risk, liquidity and collateral supply and demand in an optimized way across its operations.

This allows the bank to allocate collateral to its own underlying clients efficiently. On the other side of the equation, it can pledge out ‘cheapest to deliver’ collateral to its counterparties and the CCPs it trades with in a dynamic, real time manner.

This level of operational efficiency has allowed the firm to manage collateral costs, provide a superior level of service to its clients and take advantage of new business opportunities such as client clearing and collateral upgrades. The firm is now well positioned to grow its business and increase market share while adapting smoothly to the added demands of new regulations.

The firm now manages collateral supply and demand in an optimized way across business