



Case Studies

Collateral Optimization 3 case studies



The collateral optimization challenge

The requirement for financial institutions to pledge collateral has increased significantly as financial derivatives markets have moved toward more central clearing. As higher collateral requirements impact financial institutions, eligible assets will be in shorter supply. Extra timing complexities when fulfilling margin calls have been introduced as a result of new regulations. This makes it important to move to periodic intraday at a minimum, or real-time valuation of collateral.

As a result, the ability to optimize existing collateral has quickly become a highly valued and sought-after service. Collateral optimization does not only help banks reduce their funding costs, but provides the opportunity to create new revenue streams by offering bespoke collateral optimization services. Whether such services are primarily used to achieve savings at the bank's level or to enhance the bank's attractiveness as a clearing broker, these services should be scalable and flexible, able to adapt to future regulatory changes and provide real-time visibility on collateral inventory across all portfolios.



Introducing ActiveViam

Existing collateral systems were built for operational workflow processes, and lack the intelligence to aggregate and optimize large volumes of complex and dynamic data. Often located in the back-office and across multiple silos, these systems are increasingly unable to deliver the real-time view across all asset inventories that are required to achieve effective collateral optimization.

As a result, many institutions are seeking more powerful and innovative technologies – such as ActiveViam – to perform firm-wide inventory consolidation and collateral optimization.

ActiveViam features an in-memory, real-time aggregation and calculation framework that complements your existing systems to deliver a dynamic collateral optimization layer for all types of users – whether in the back, middle or front office.

The cutting-edge technology underpinning ActiveViam empowers you to perform aggregation across heterogeneous data sources, plug in your own business logic as well as optimization algorithms, and to build a bespoke, future-proof, optimization framework.

Case Study #1

Creating new revenue streams by offering collateral services

A global leader in investment management and investment services has launched a collateral service designed to help their buy-side clients manage their collateral and counterparty exposures via a single web-based client portal.

This new service is the result of the company's willingness to offer differentiating services to their clients faced with collateral scarcity and increased funding costs in the current regulatory environment pertinent to derivatives. With increasingly demanding buy-side clients exploring new ideas and partners, the company invested in these innovative capabilities to create competitive advantage and help its clients better meet regulatory requirements.

As the core aggregation functionality of this new platform, ActiveViam consolidates complex collateral and asset inventory data from five different systems into a single unified collateral hub. Before deploying ActiveViam, clients found it difficult and time-consuming to gain unified views of their collateral data. Data was complex and scattered across many systems. As a result, clients had to explore multiple Excel spreadsheet reports, a process that took too long to retrieve the information that was relevant to them.

The multi-dimensional analysis capabilities brought by ActiveViam helps clients gain access to relevant information very quickly and easily: More specifically, ActiveViam offers clients a consolidated and transparent view of all their available collateral and all their collateral positions held within the bank. As a result, buy-side clients are able to enhance their ability to manage their collateral and counterparty exposures via a single portal.

Case Study #2

Reducing funding costs through a better utilization of securities instead of cash

A large international bank chose ActiveViam as its inventory consolidation and optimization tool. The choice of ActiveViam was part of a global initiative to implement a firm-wide collateral optimization process, helping the bank realize efficiency gains and diversify into the clearing broker business.

Collateral Margining was largely cash based and run in product silos. In light of the potentially significant increase in margin call requirements brought about by the new regulatory environment, the bank was looking to put in place a framework to help them better utilize their pool of securities sitting idle across their balance sheet. Another requirement was to efficiently align collateral management silos across product areas in order to realize efficiency gains. Last but not least, it was important for the bank to meet these functional requirements, while still leveraging their existing legacy systems.

ActiveViam is used to automatically select eligible fixed income assets in order to cover initial and margin calls. Using multiple data inputs such as the bank's inventory including client inventory, legal agreements, reference and market data, ActiveViam provides visibility over the bank's and client's inventory as a preliminary step before computing the eligible "cheapest to deliver" basket of assets per margin call. As a result, the bank will be able to reduce their cost of funding.

ActiveViam is a non-intrusive technology that seamlessly integrates with underlying systems, enabling the bank to leverage its existing legacy applications, thus keeping costs under control and achieving very fast time-to-market.

This real-time visibility into the collateral portfolio provided by will also contribute to the bank's ability to offer proprietary, value-add clearing services to their clients. By providing these cutting edge collateral services to the their clients, the bank is able to continue to offer value-add services to their existing clients while allowing them to win new clients and increase revenues.



Case Study #3

Achieving efficiency gains through the implementation of a central collateral trading desk

A leading corporate and investment bank in the Nordic countries has chosen ActiveViam's Atoti+ solution to support the implementation of a central collateral trading desk.

Their collateral management function was scattered across multiple trading desks, with each trading desk managing its own asset inventory. The bank also kept a central pool of available assets in order to meet the liquidity ratios imposed by the Basel III regulations, especially NSRF and LCR. While the bank was making use of inventories, it lacked the consolidated view of available and already pledged collaterals across the whole organization. This lack of visibility translated into a sub-optimal utilization of existing assets. The bank also faced potential revenue shortfalls resulting from an overcautious approach to asset utilization in order to stay within required liquidity ratios. Furthermore, the bank lacked an intraday view of how collateral evolved during the day. The end of day position produced for each desk did not allow them to keep track of inventory moves as they happened. So if their EOD position highlighted a collateral shortage, traders turned to the stock lending desk to borrow bonds or equities from the market, instead of using assets available in another desk's inventory at this point in time. This situation resulted in higher collateral funding costs.

The bank chose Atoti+ solution to create an intraday, crossasset inventory consolidating assets from several sources, including the stock lending, fixed income and equities desks. The resulting visibility helps them realize significant cost savings through more efficient usage of their existing assets. For example, our solution will provide an accurate and timely understanding of which collaterals are available, in which country and at which custodian they sit, a key step before true optimization can be conducted.

The implementation of Atoti+ will also underpin the bank's creation of a centralized collateral trading desk that delivers collateral services to the bank's own trading desks and to the client organizations using the bank as their prime broker. For example, collateral managers will use Atoti+ to retrieve all exposures to counterparties, look for eligible collateral in the inventory, determine the best asset classes to be utilized and eventually book them. The bank is also planning to use the solution as a centralized hub where all CSA and implicit eligibility rules by counterparty can be documented and shared by traders and collateral managers. Finally, the full visibility on collateral will put the bank in a position to make trading desks more accountable for their P&L: A fee-based mechanism, based on the type and cost of asset being used as collateral, is currently being investigated.

Key Benefits



Cross-silo collateral optimization



Consolidated view of inventory, collateral exposures and requirements



Flexible collateral analytics



Dynamic 'what-if' scenario analysis



Real-time alerts and monitoring



Rapid time-to-market



Non-intrusive technology that seamlessly fits into existing systems



Full ownership and control

About ActiveViam

ActiveViam provides precision data analytics tools to help organisations make better decisions faster.

ActiveViam started in 2005 with the vision of leveraging in-memory technology to create an analytics platform where businesses could leverage the largest data sets without restrictions, keep them up-to-date in real time and use them to empower their decision makers.

Our goal at ActiveViam, is to let organisations not only make decisions faster, but better; to not only reach their data, but their potential; to not only see their data, but find their way into the future.

ActiveViam is a privately owned company with offices in Paris, London, New York and Singapore.

For more information please visit: www.activeviam.com

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