CanDeal Uses TickSmith to Help Address FRTB Compliance

Centralizing and Automating Data Flows for FRTB

DataVault Innovations, a leading provider of Canadian data services, worked closely with TickSmith to develop a data pooling solution for Canadian banks. The new platform is designed to ensure FRTB compliance as well as act as a vehicle for the Canadian banks to monetize their investment in data.

The six largest Canadian banks –BMO Nesbitt Burns, CIBC World Markets, National Bank Financial, RBC Capital Markets, Scotia Capital, and TD Securities – are shareholders in DataVault Innovations, which is the data business of the CanDeal Group. To meet the FRTB compliance deadline by January 2022, the bank shareholders need to collectively pool their data into a broader and more comprehensive dataset, which would increase the accuracy of each firm’s risk models.

The primary objective of CanDeal’s data pooling solution is to reduce the cost of capital set aside for at-risk assets. In addition to privately pooling data, the major banks want to better control and monetize the combined data. The resulting derived content would not only help the banks comply with FRTB regulations, but would allow them to generate new revenue by selling the pooled data to the markets—a win-win situation, as they previously gave this data away.

TickSmith develops scalable data pooling solution

TickSmith worked closely with DataVault Innovations to deliver a full data management stack and the advanced processing capabilities DataVault Innovations needed to build its platform for FRTB compliance, plus additional dataset modules for new use cases along the way. This includes the ability to ingest data from different sources, anonymize the data, generate modellability reports, and feed into downstream pricing services. Each bank requires access to the shared platform to normalize and collect their proprietary data securely at scale, as well as to receive derived content from the collective data pool. TickSmith’s technology also enabled the platform to monetize the banks’ data. As a result of the collaboration, TickSmith is now able to offer a data pooling solution, TickSmith GOLD, to other markets including but not limited to the United States and many European countries.

“To get the banks to approve this, I had to demonstrate that we could take the data, pool it, apply some FRTB risk qualifications, entitlements, encryption, monitoring, and deliver an audit trail,” says Andre Craig, head of Data Innovations at CanDeal. “TickSmith had a lot of those capabilities so it made sense to work with Francis and his team to reduce time-to-market. After all, the regulatory capital savings could be in the billions of dollars, so the opportunity to help the banks become more efficient, and deliver meaningful cost savings, was both compelling and immediate.”
“We have the experience, and both the technological and regulatory know-how,” said Jimmy Huang, Data Pooling SME at TickSmith. “The intersection of regulatory compliance and big data technology is niche but important. Fortunately, we’re the only company that is able to create this type of product.”

**Powered by Amazon Web Services (AWS)**

Building on-premises was not feasible, so TickSmith implemented DataVault Innovations’ Data Pooling Solution on AWS for easy and fast deployment. The platform runs on Amazon S3 (Simple Storage Service) and Amazon EC2 (Elastic Compute Cloud) capabilities to auto scale processing tasks, efficiently handling any volume of data. Additional AWS tools the platform is built on include Amazon Athena, CloudWatch, SQS (Simple Queue Service), and AWS KMS (Key Management Service) to create and manage cryptographic keys. Being on the cloud allows each bank to securely sign into the encrypted data pooling web portal from various locations. The workflow technology of the data pooling platform normalizes and standardizes each firm’s data, while simultaneously maintaining the individual bank’s privacy and anonymity.

The platform’s enhanced entitlement capability allows participating banks to control how much data the other firms can view and access. The process of sending large amounts of data in and out and mapping them together required security measures that must be rock solid and bulletproof. “Each bank had its security measures and InfoSec requirements that we had to meet,” adds Huang. “AWS helped us to meet those needs.”

**Improving Risk Models to Reduce Cost of Capital**

The Data Pooling Solution that TickSmith developed has broken new ground in big data technology; handling millions of OTC instruments from different sources; and for producing collective, consolidated data for modellability. For FRTB compliance, the more data collected, the more accurate the risk models are.

DataVault Innovations’ bank stakeholders are already benefitting. Recent FRTB pooled data shows a bank is getting a 667% increase in securities considered modellable, with the average being more than 400% for all the banks. In every instance, each individual bank saw a minimum of at least double in the securities deemed modellable from data pooling.

**About TickSmith**

TickSmith’s Big Data software platform—GOLD—gathers, organizes, leverages and distributes data for democratization, market surveillance, and analytics for capital markets and financial firms. Our data management solutions are used by major banks and exchanges worldwide.