



Basel 2 Credit Risk data integration / Common Reference Data implementation

Abstract

The client initially requested Avantage Reply to develop an approach to integrate data from a wide range of source systems to provide inputs for the third-party RWA calculation tool required under the Basel 2 Advanced IRB method. Avantage Reply identified as a critical issue a lack of reference data standardisation and governance across the organisation, and escalated the issue to the Basel 2 programme manager to secure additional budget for its resolution. The common reference data framework, data integration toolset and associated standard input and output data interfaces developed by Avantage Reply were adopted and successfully implemented by the client, not only within but also outside the original Basel 2 credit risk arena.

THE CLIENT

The client was a mid-sized European-based bank with corporate and retail banking operations in a number of countries across Europe, Asia and the Americas, including the UK, and investment banking operations centred mainly in the UK.

THE CHALLENGE

The client selected a third-party software product to carry out RWA calculations under the Basel 2 Advanced IRB method, and asked Avantage Reply to develop an approach to integrate data from a wide range of source systems, including front-office systems, regional data warehouses and reference data sources, in order to provide the input required by the RWA calculator. In addition, there was a requirement to deliver calculated outputs back to various business units to support local information needs and local reporting.

The selected software package incorporated an internal data validation mechanism, use of which made direct loading of the package's database via a standard ETL tool impractical. From the outset, because of the wide range of data sources, spread across many locations and many different systems, Avantage Reply identified the lack of reference data standardization and reference data governance across the organization as a critical issue.

APPROACH AND SOLUTION

In order to address the lack of reference data standardisation and data governance group-wide, we escalated the critical importance of this issue to the Basel 2 programme manager and secured budget to solve it. We identified a reference data working group that had been established as part of the Group Finance organisation, and persuaded them to take ownership of the problem.

Within three months Avantage Reply consultants had established a central reference data platform with a 'federal' architecture so that it could leverage existing golden reference data sources without duplicating them. Avantage Reply worked with the client to create a reference data governance framework and data management process, including rigorous change management and clearly-defined data ownership, stewardship and stakeholder concepts.

Within a year, Avantage Reply had built sufficient support for the approach and arranged for it to be adopted bank-wide. Business units were then obliged as a matter of bank policy to make use of the standard reference data when exchanging data with Group or with other business units.

Avantage Reply designed data loading and data extraction components that could interact directly with the third-party RWA calculation tool, and worked with the client to define standard input and output data interface specifications to support the data loading and extraction, incorporating the standard reference data domain definitions that we had established. The specifications supported data integrity checks so that data quality controls could be implemented prior to loading, with diagnostic outputs on failure. Data integrity checks included compliance with the adopted reference data domain definitions. The resulting data integration toolset allowed for data repair locally or repair and resubmission from source.

RESULTS AND BENEFITS

The group-wide common reference data framework was adopted by the bank, and leveraged widely, not only within but outside the original Basel 2 credit risk arena; it was adopted for example as part of the new financial reporting architecture of the bank.

The data integration toolset and the associated standard input and output data interfaces for Basel 2 credit risk was successfully implemented group-wide as part of the Basel 2 programme.

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