

CASE STUDY

70% Reduction in Insurance Treaties Data Processing Time

CLIENT

The Actuarial Modelling and Reporting team of a global reinsurer engaged MBE Consulting to develop and implement a new system for the model point creation process for all treaties in the business.

CHALLENGE

- The team needed to transform the Policy Administration System (PAS) data into the format required for their internal model.
- Following a successful pilot by MBE to migrate two treaties from the legacy tool to Excel Power Query, the client required the solution to be productionised.
- The Treaties sourced data from multiple sources, including the client's SQL Server Enterprise Data Warehouse (EDW),

APPROACH

The MBE team performed a thorough review of the process and successfully implemented the following:

- Provided a full data inventory assessment of the PAS files compared to the EDW, including analysis of the data quality and identifying discrepancies between the PAS extracts and the EDW data.
- Prototyped the ability to dynamically switch between files and the SQL Server as the data source.
- Assessed and optimised the end-to-end treaty model point creation process, including the manual steps and legacy data transformations.
- Evaluated the non-functional requirements required for the production process.
- Developed and implemented a revised model point creation process for all treaties using Excel Power Query.

RESULTS

- The new process achieved a 70% reduction in data transformation run time compared to the legacy tools.
- The largest portfolio with more than a million records can now be processed without being split into smaller files.
- The time-consuming manual steps were removed using Excel Power Query logic, including dynamic switching between sources (files or the EDW).
- End users can easily follow the query logic and make data transformation changes without IT or developer input.

AT A GLANCE

Challenges

- Actuarial team needed to transform client Policy Administration System data extracts for internal models.
- Data ingestion was complex due to multiple sources, including the SQL Server.
- Solution needed to be production-ready to replace the legacy tools.

Results

- 70% reduction in run time using Excel Power Query.
- Large portfolios (1M+ records) processed in a single run.
- Removed manual steps and dynamically linked to multiple sources.
- Future changes can be made without IT or developer support.



Throughout the project, the MBE team attentively listened to our requirements and maintained a high level of professionalism. We are extremely pleased with the results and the efficient, streamlined approach MBE brought to our operations.

Actuarial Manager

