

CASE STUDY

Capital Model Point Data Process Transformed and Modernised

CLIENT

The Actuarial team of a global reinsurer engaged MBE Consulting to review and improve their capital model point data process, moving away from a costly legacy system.

CHALLENGE

- The actuarial team needed to transform and aggregate the valuation model point data for their capital model runs.
- The model point file for each treaty was too large to work with in Excel and was being transformed and aggregated using legacy tools.
- The mappings and aggregation groups required code changes, but the team had limited experience in the legacy tools.
- The legacy tools had very high ongoing license costs.

APPROACH

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

- Performed a root cause analysis on the existing data management processes.
- Analysed the end-to-end capital model point creation process including the manual steps, the legacy data tool transformation logic and the aggregation logic.
- Prototyped dynamic mapping and aggregation mechanisms in Excel Power Query to avoid the need for users to make code changes.
- Following the success of the first stage of the project successfully implemented the use of Excel Power Query as the replacement tool for the capital model point creation process.

RESULTS

- Removed the need for code changes when actuaries were required to make mapping and aggregation grouping changes.
- Processed the largest treaty (more than one million model points) without the need to split it into smaller files.
- Completed a production-ready implementation in less than two months, with the client completing successful parallel runs.
- Removed the ongoing license costs for the legacy system.

AT A GLANCE

Challenges

- Large model point files were too big for Excel and required legacy tools.
- Code changes were needed for mapping and aggregation, but limited experience within the team.
- Ongoing licensing costs for legacy tools.

Results

- No more code changes for mapping and aggregation.
- Processed large treaties (over 1M model points) without splitting files.
- Delivered a working solution in under two months.
- Removed the legacy tool license costs.



MBE Consulting was instrumental in streamlining our capital model point data process and reducing our reliance on outdated, costly legacy systems, providing a far more efficient, cost effective and flexible solution.

Actuarial Modelling Lead

