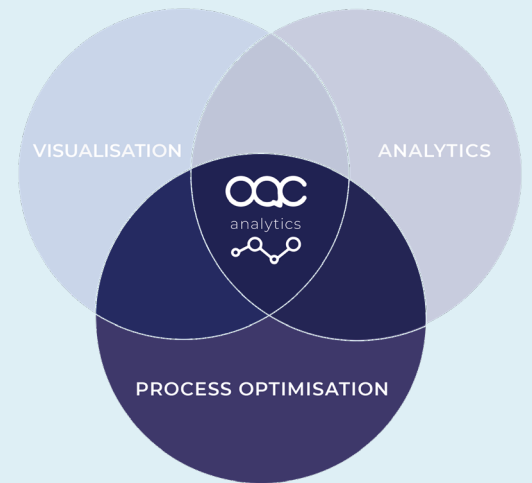


Power Query - Excel's Best Kept Secret?

OAC Analytics has embraced the usage of different types of technology and tools for different purposes including R, Python, Power BI and others. One such tool is Power Query, one of the most transformative and useful elements of Excel functionality. This allows datasets to be read, processed and transformed within a process where logical rules can be defined and flexibly re-used. All updates and adjustments can be recorded as part of the process and each step can be recorded and extracted to give a clear audit trail. Steps can be repeated or edited as required. For unexpected changes in data format, certain rules can be adapted whilst the existing process logic is retained.

OAC Analytics has considerable experience in utilising Power Query and can offer assistance with its implementation. Below are two case studies on processes we recently improved.



Case Study 1: OAC Modelling Client

We were commissioned to rebuild a data process replacing a manual process that drew on 5 different data files and involved considerable copy and paste operations. The outcome was an automated template that formatted and validated data at the click of a button, and included:

- Data validation and reconciliation performed at the click of a button.
- Summary statistics of the data
- A formatted Data file ready to be fed into a calculation model
- Audit trail of data processing date/time stamps
- Year on Year Policy Reconciliation
- Options to search and override specified data fields in a controlled way

We trained the client in usage of the template file such that they were not only able to use it but also adapt it to further subsets of their data.



After OAC Analytics provided a solution for a client they said ***“Power Query has allowed us to dramatically improve the time taken to work through our monthly data reconciliation, reducing it from four days to a few hours. We have been able to adapt our existing data controls to Power Query with comfort the checks are being done appropriately.”***

Case Study 2: OAC Valuation Client

OAC Analytics have replaced a cumbersome manual data process with an automated one. This reduced the total amount spent on data processing from over 4 days to within one hour (per valuation). Features of this process include:

- Data validation and reconciliation performed at the click of a button.
- Identification of data changes within key fields
- Identification of missing data items
- Exception reports
- A link to a separate policy claims file to perform a basic claims analysis
- A complete list of process steps used for auditing purposes.

After transformation of the existing process, a key business user said ***“Automation of manual processes reduced the overall amount of time spent and allowed us to more quickly focus on the value-added analysis we prefer to do.”***

Additional Benefits of Power Query

Power Query offers a wide range of functionality and processes can be built quickly and easily using in built wizards. Other examples of useful features and operations are:

1. Automatic identification of data errors in formats
2. Ability to specify/handle numerous different data formats
3. Combination of multiple data sets of different formats.
4. Re-application of identical processes to multiple files
5. Addition of Data Visualisations

Final word:

To convince teams that are reluctant to move away from the ease and accessibility of Excel to a purely programmatic experience, Power Query offers a first stepping-stone. It allows visibility and transparency within a familiar Excel context, whilst adding the rigour of rule-based query logic, thus removing subjectivity, and reducing risk. For users looking to move away from manual processes, Power Query may be the best first step on this journey (although not necessarily the last). The importance of this will increase as companies look to perform valuation processes more frequently.



For more information

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