

Excel to Power BI Conversion

Client: Anonymous

Business Size: Corporation

Industry: Gardening

Country: UK

Technology: Excel, PowerBI

Objective: Replace Large Excel Report with PowerBI

The Brief

To replace an Excel spreadsheet, designed to generate MI for a profit report, with a Power BI dashboard/report suite, and to also eliminate manual processes.

Challenges

The Excel sheet had a few drawbacks, namely:

- Size – because of the huge amount of data, Excel was unable to cope with it all at once, and was only able to hold a few months' worth of data. Converting to Power BI should eliminate this.
- Manual processes – each week the data is exported to a text file on the network. This data is then manually imported in to the Excel sheet, with some old data deleted to create sufficient space.
- Manual adjustments – on occasion, manual adjustments to the imported figures are required.
- Power BI limitation – during implementation it was discovered that even Power BI could not handle the quantity of data in the way the client wanted.

Solutions

Our consultant met with the client's account manager to discover what was done to generate the current reports, including any manual steps, and obtained copies of the data and reports to see what needed and how to generate it.

A regular weekly job was set up to export data from the accounts system and import into the client's managed Azure database. This held the full dataset and it was possible to connect Power BI directly. This replaced the cumbersome process of importing from the text file every week. Supporting information was also created to help manage financial periods.

There are occasions when manual adjustments are necessary, but it was deemed too difficult to obtain adjustments from the accounting system. An additional table was created in the Azure database allowing user adjustments to be entered and incorporated into the reports generated by Power BI.

Case Study
Chemical Transportation Company

Once the connections to the database were set up, and the correct permissions added, a schedule was added for the weekly data import to pick up the previous week's data after it was exported from the accounts system.

One of the new Power BI reports was failing due to the size and complexity the report. A pragmatic solution here was to restrict the report to a single year's data. While not ideal, this was still a significant improvement over using Excel and was accepted by the client.

By the end of the assignment, the new Power BI system was in place, running with considerably less manual involvement than before, and with full access to relevant current and historical data.

Lessons learned

Client staff being friendly, approachable and open to improving their existing procedures was a definite advantage on this project.

While Power BI officially does not have a limit on the amount of data it can hold, there is evidently a practical limit to the amount of data (or possibly calculations that can be done) on any one matrix. This was unexpected with little relevant information found online.