Roger Hartley Portfolio

# Introduction

This portfolio provides a brief overview of my skills in SQL, Excel, and Power BI, including Power Query as at the 9th of July.

# SQL/T-TQL Skills

Please open the document named 'T-SQL Project' to see more details on how I practiced some of my SQL skills on Microsoft SQL Server 2022. I used Google SQL and Legacy SQL for the assignments during the Google Data Analytics Professional Certification I completed. That program used the web based BigQuery SQL server. To complete the SQL portion of this portfolio, I had to learn how to install Microsoft SQL Server 2022 from scratch and install and utilize SQL Server Management Studio (SSMS) version 21. This server uses T-SQL, and I had to learn how to connect to the server, log in, create a database, create a table, and upload other databases into the server. Only then could I start having fun with querying tables. The document 'T-SQL' has screenshots of the code I used and the queries I ran, from basic SELECT FROM WHERE queries to some including joins and groupings.

I would assess my SQL ability as beginner to intermediate. Should I get a job that requires more SQL knowledge, I would get myself a copy of T-SQL Fundamentals by Itzik Ben-Gan and work my way through it to improve my SQL skills even more.

# Excel Skills

For this portfolio, I created four Excel files to showcase my Excel skills.

In the ***excel\_unclean\_to\_clean\_rhartley*** file, I show my data cleaning ability, where one sheet shows the uncleaned data and another shows the cleaned version. I do the cleaning in Excel with filters, sorting, find and replace, conditional formatting, changing columns to correct formats, splitting and merging columns where necessary. I also use functions like TRIM to get rid of unwanted blank spaces and VLOOKUP to look up certain values. Excel also has Power Query, which I use on more advanced data cleaning projects.

In the ***car\_sales\_kpi\_rhartley*** file, I took uncleaned data, cleaned it, and created KPI reports with charts, an interactive dashboard with slicers, a pivot table, and a pivot chart.

In the ***personal\_budget\_template\_rhartley*** I created an Excel worksheet that helps with family budgeting.

In the ***raw\_data\_to\_profit\_loss\_analysis\_rhartley*** I used many of the tools I've discussed previously, and I have added some analysis and insights.

I would say that my Excel skill level is very good to advanced, as I have used it extensively during my working life, and I really enjoy working with it.

# Power BI Skills

In the **powerbi\_dashboard\_rhartley** file, I showcase my abilities by building an interactive Power BI dashboard. The dashboard is interactive and features a slicer, a bar graph, a heat map, a table, a line graph, and a KPI indicator. These interactive indicators draw on two Excel files that I imported, cleaned, and joined, as there were a primary and foreign key on them. Some of the columns had to be formatted to the correct formats like text to numbers and numbers to currency. Currently, I would assess my Power BI skills as intermediate.

# Conclusion

This portfolio has given an overview of my data and business intelligence analysis skills. I believe they are currently at the following skill levels:-

* SQL/T-SQL:- Beginner to intermediate
* Excel:- Very good to advanced
* Power BI:- Intermediate

My immediate future improvement plans are to do the Microsoft Power BI certification next. Should I land a position that requires more SQL skills, I will practice and do as many crash courses and read a few good books to get to a level that exceeds my employer's expectations.