Power BI One Day Course

Power BI is a cloud based data analytics tool

Level: Basic and Intermediate

Target Audience: Anyone who has an interest in creating incisive reports using Power BI

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About the Speaker: Kieran Wood

- Consultant, Developer, Architect, Trainer and Publisher @ Innovative Business Intelligence Ltd
- 25 Years experience in Data Management and Analytics
- Power BI Author, trainer and public speaker
- 22K+ followers on LinkedIn
- Passed 18+ Microsoft Data focused exams

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Introduction

- This is a two day Power BI course condensed into one day which is based on the following book https://www.amazon.com/Data-Analytics-All-Power-Commercial-ebook/dp/B0821V8R15
- So this course will consist of exploring and amending the book solution to meet the agreed course objectives … https://community.fabric.microsoft.com/t5/Data-Stories-Gallery/Power-BI-Best-Practice-Recommendation/m-p/745072#M2786

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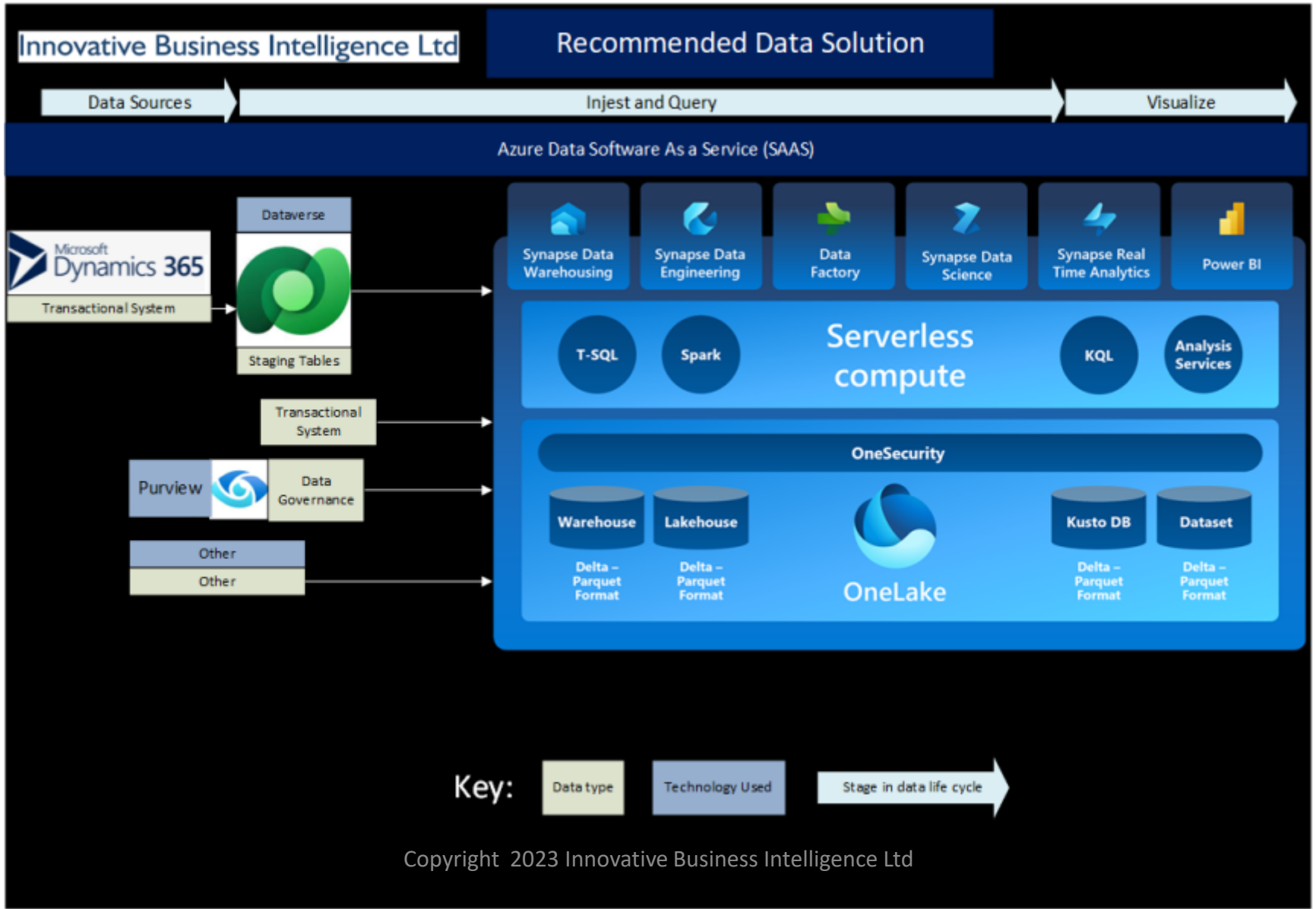
Microsoft Fabric



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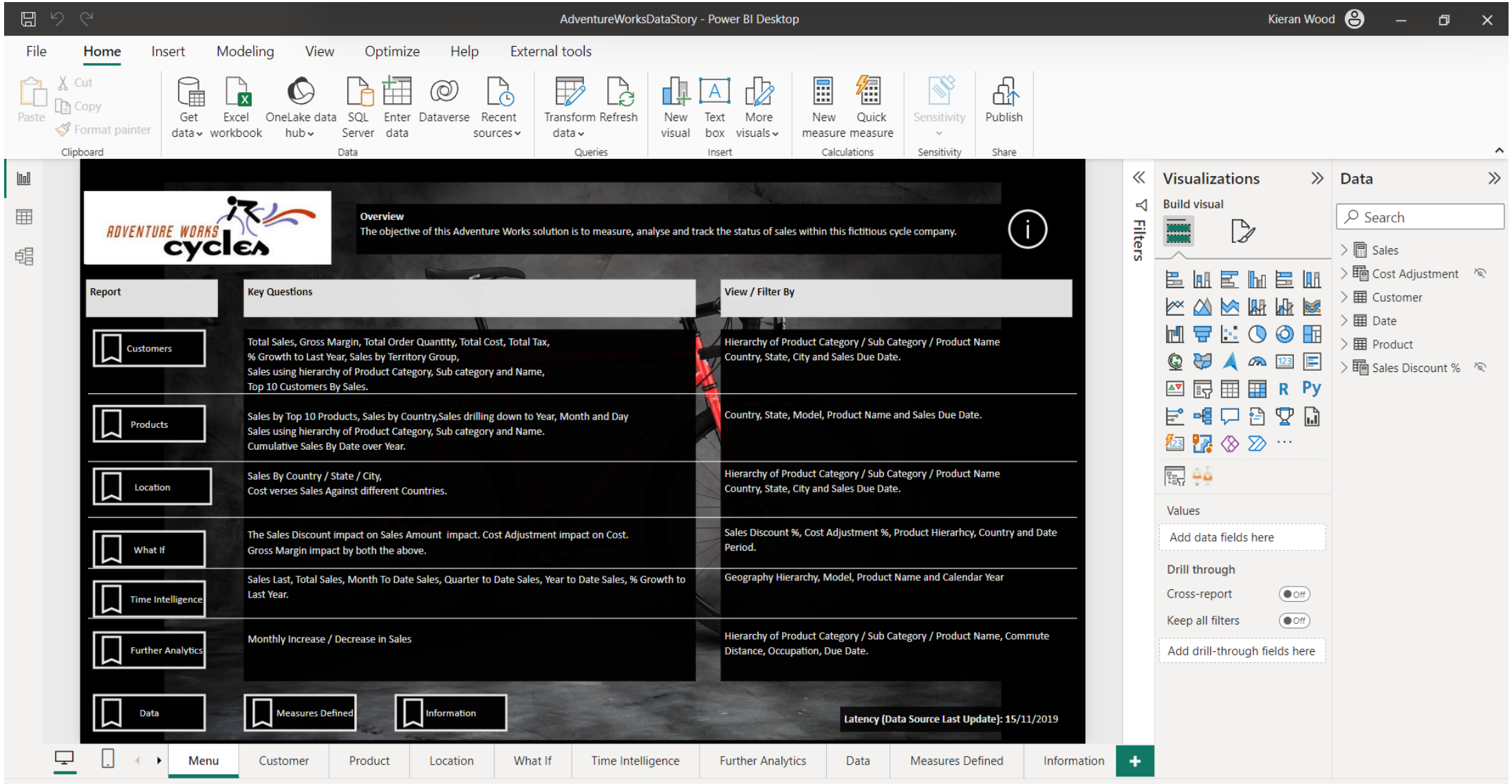
Get the Solution Running within Power BI



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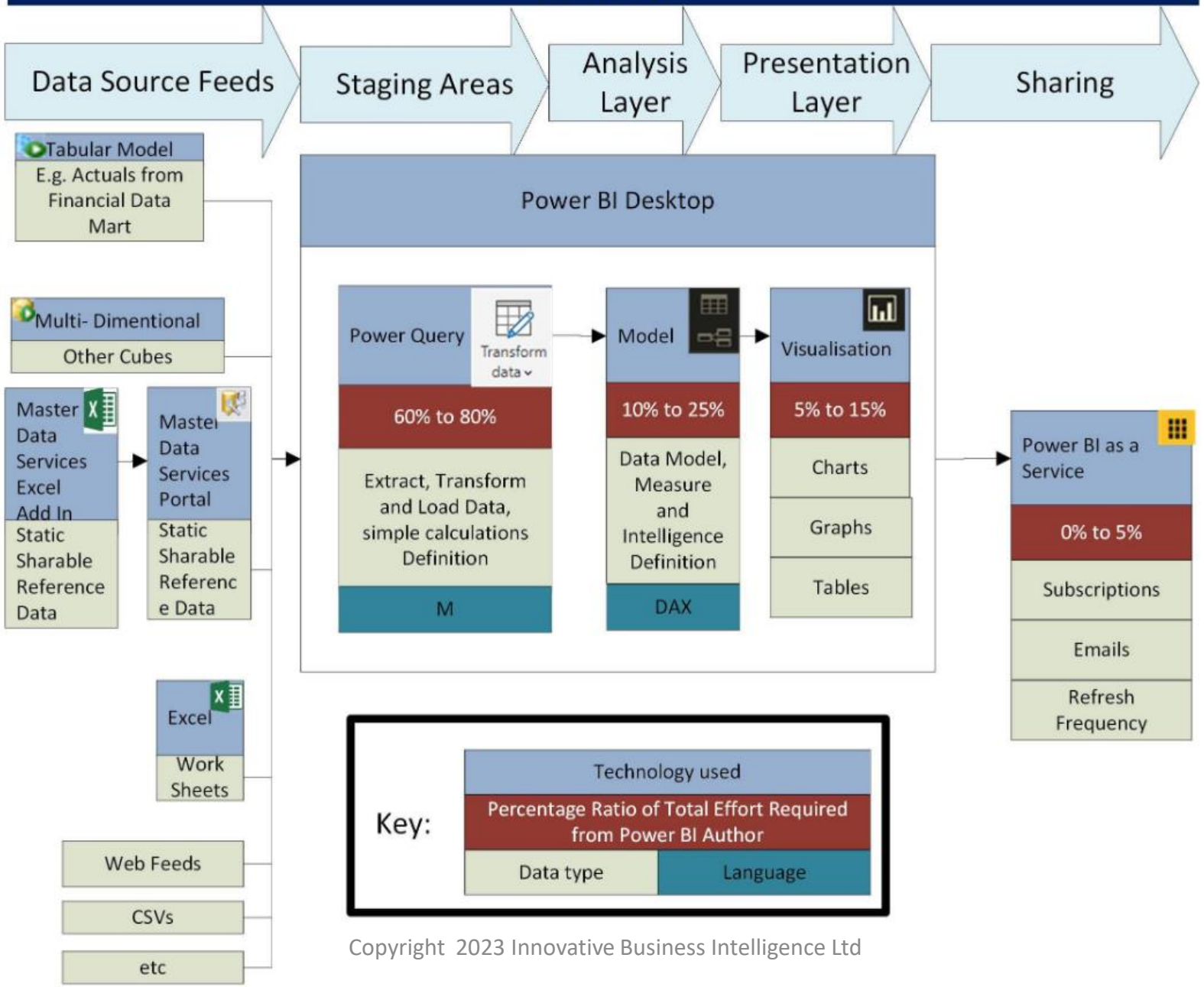
Power BI Architecture for Power BI Authors next steps Best Practice



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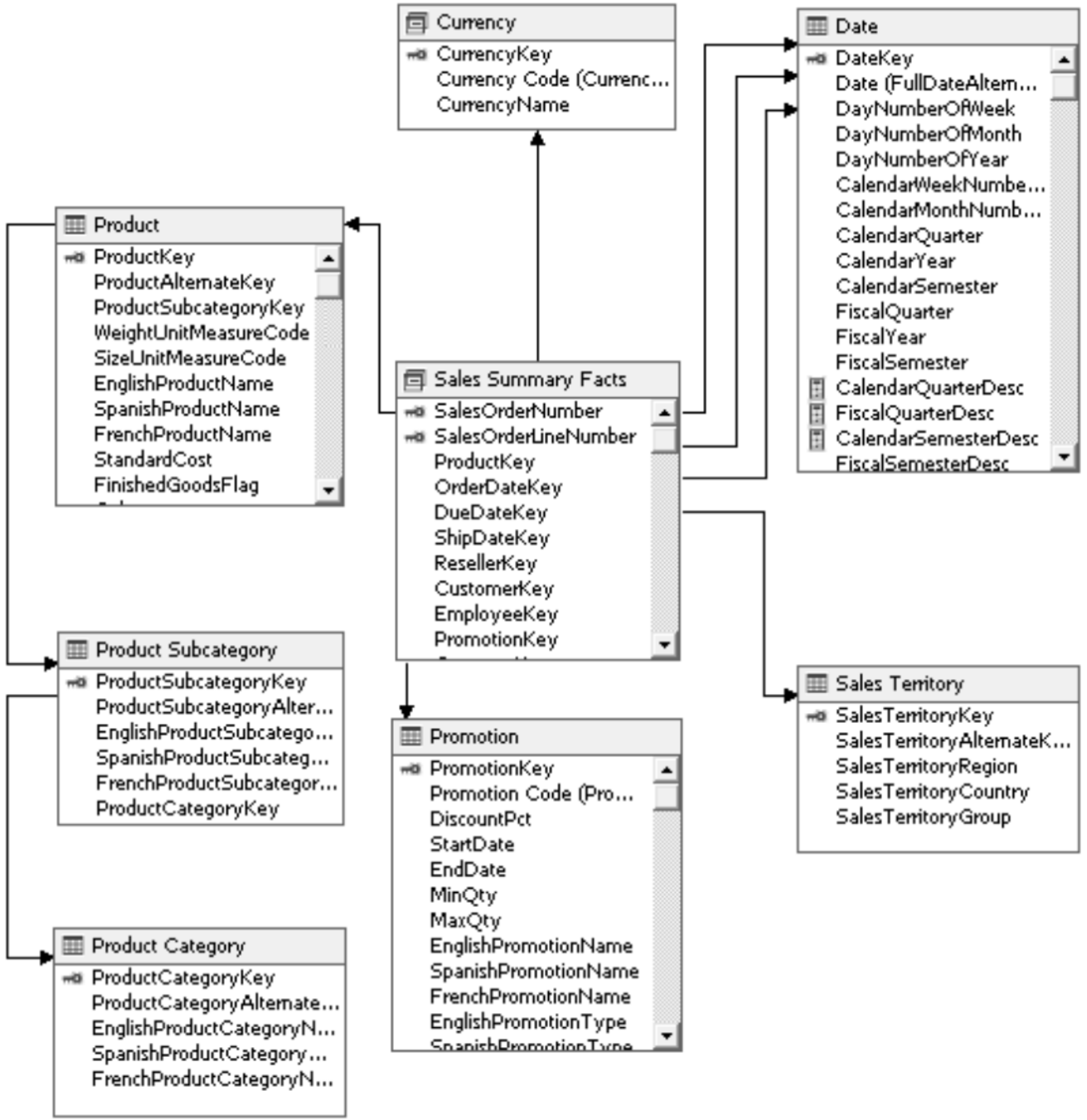
Data Model High Level Physical Example



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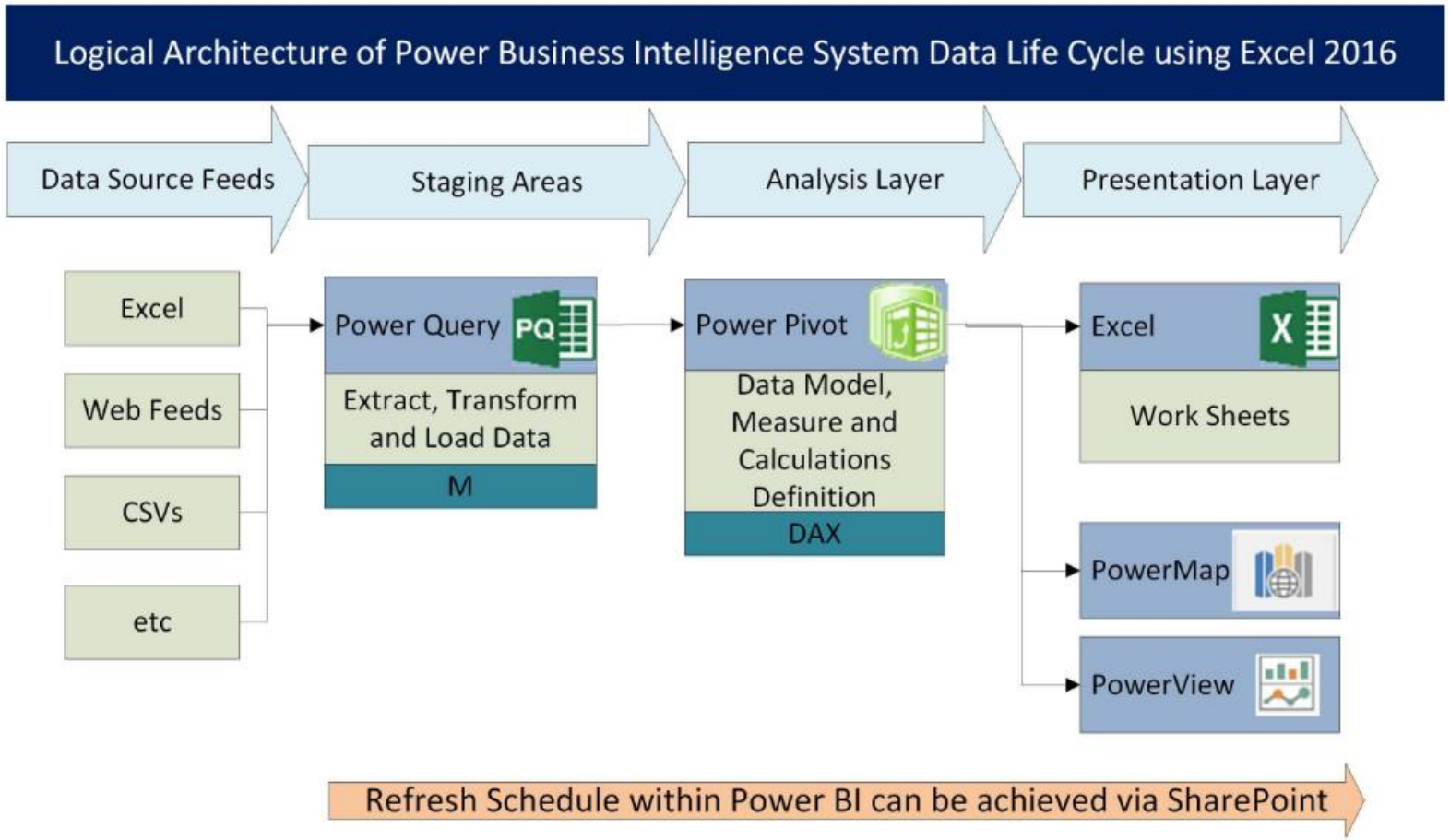

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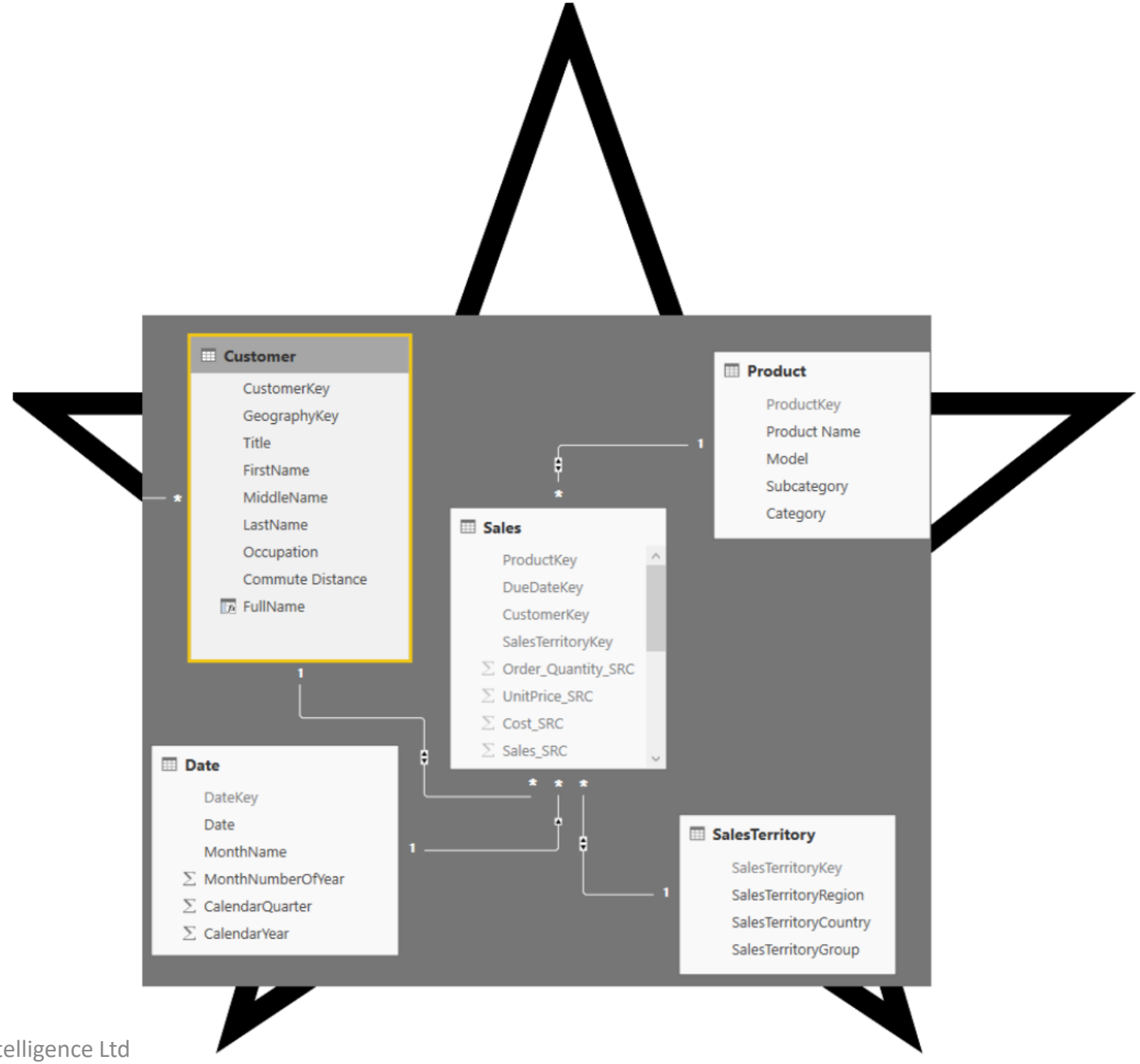
Star Schema



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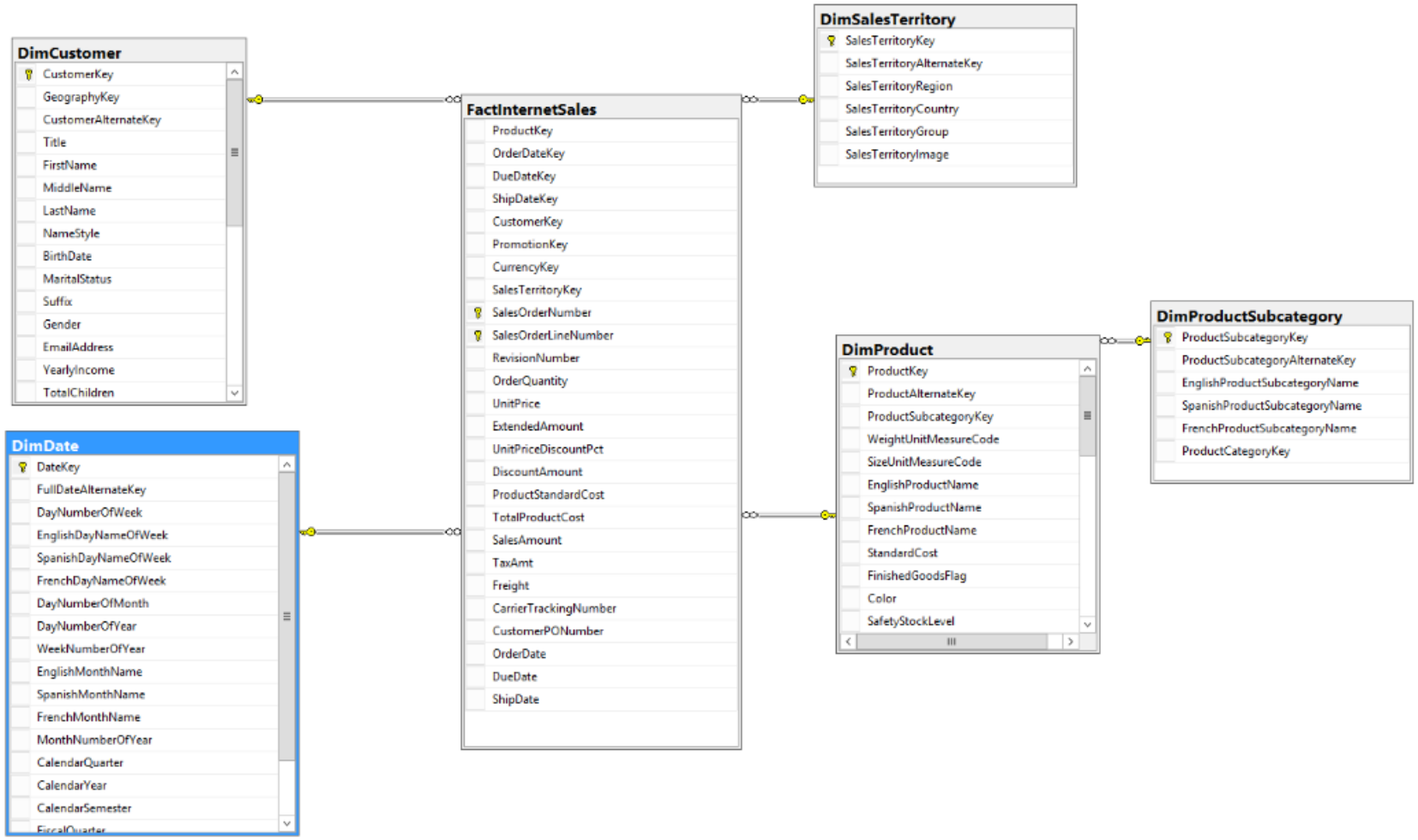
Snowflake Schema



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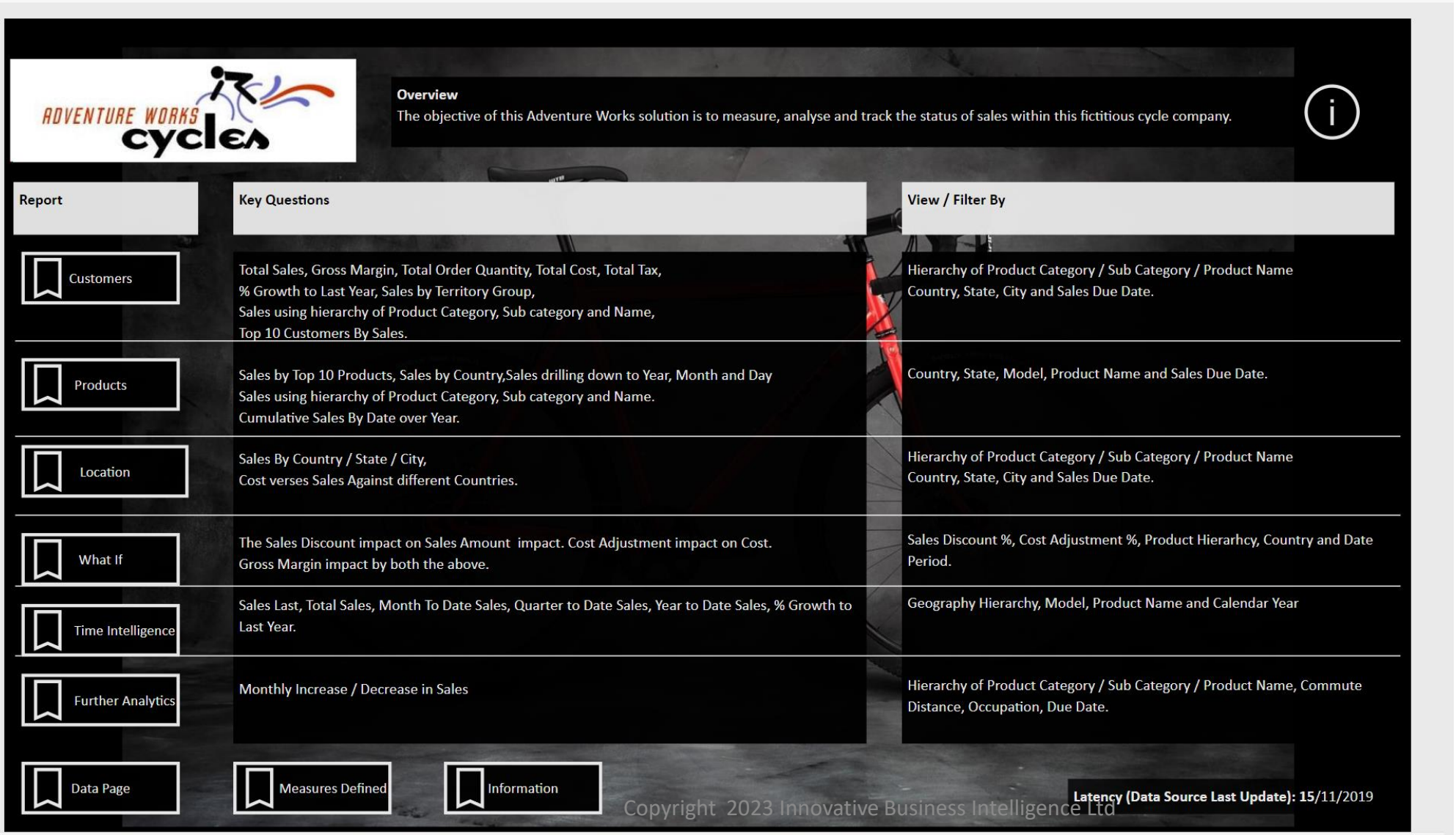
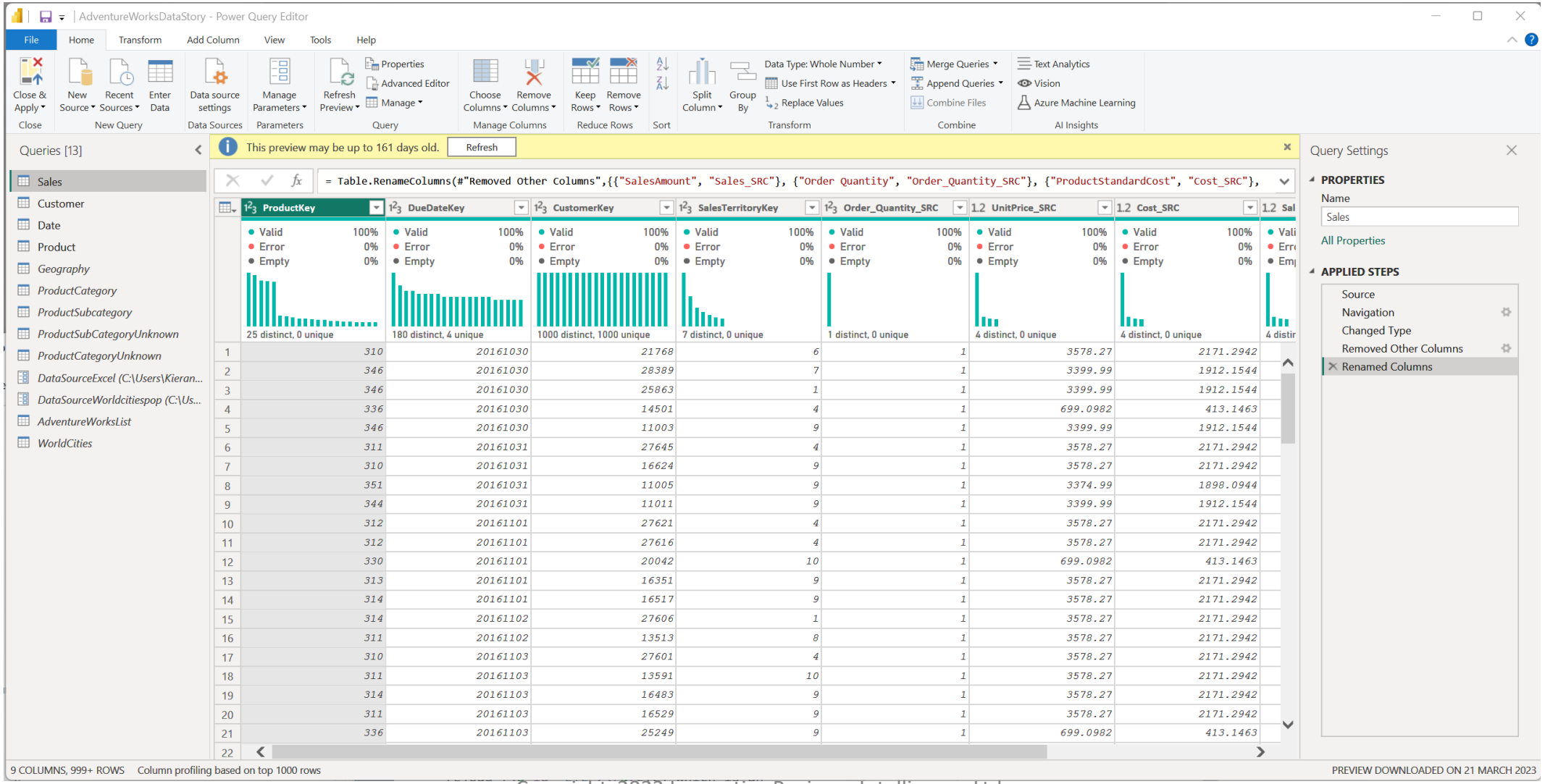
Navigate the Sample Solution



Power Query for Extract, Transform and Load



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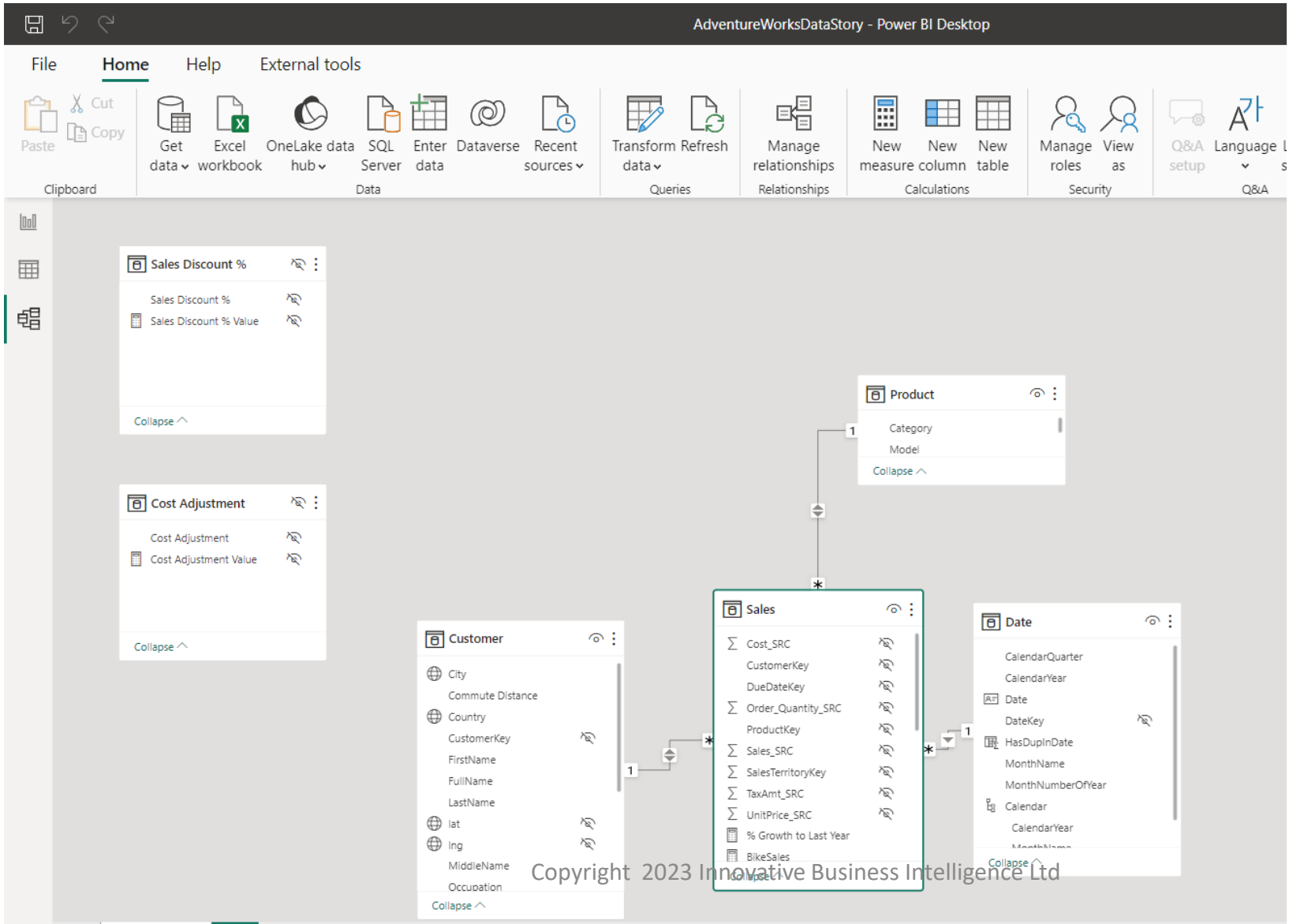
Data Model



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Measures

```
Cumulative Sales =
CALCULATE ([Total Sales],
FILTER ( ALL ( 'Date'[Date] ), 'Date'[Date] <= MAX ( 'Date'[Date] ) ) )

Diff. Sales and Sales Last Year = [Total Sales] - [Sales Last Year]

Sales MTD = TOTALMTD([Total Sales],'Date'[Date])

Sales QTD = TOTALQTD([Total Sales],'Date'[Date])

Sales YTD = TOTALYTD([Total Sales],'Date'[Date])
```

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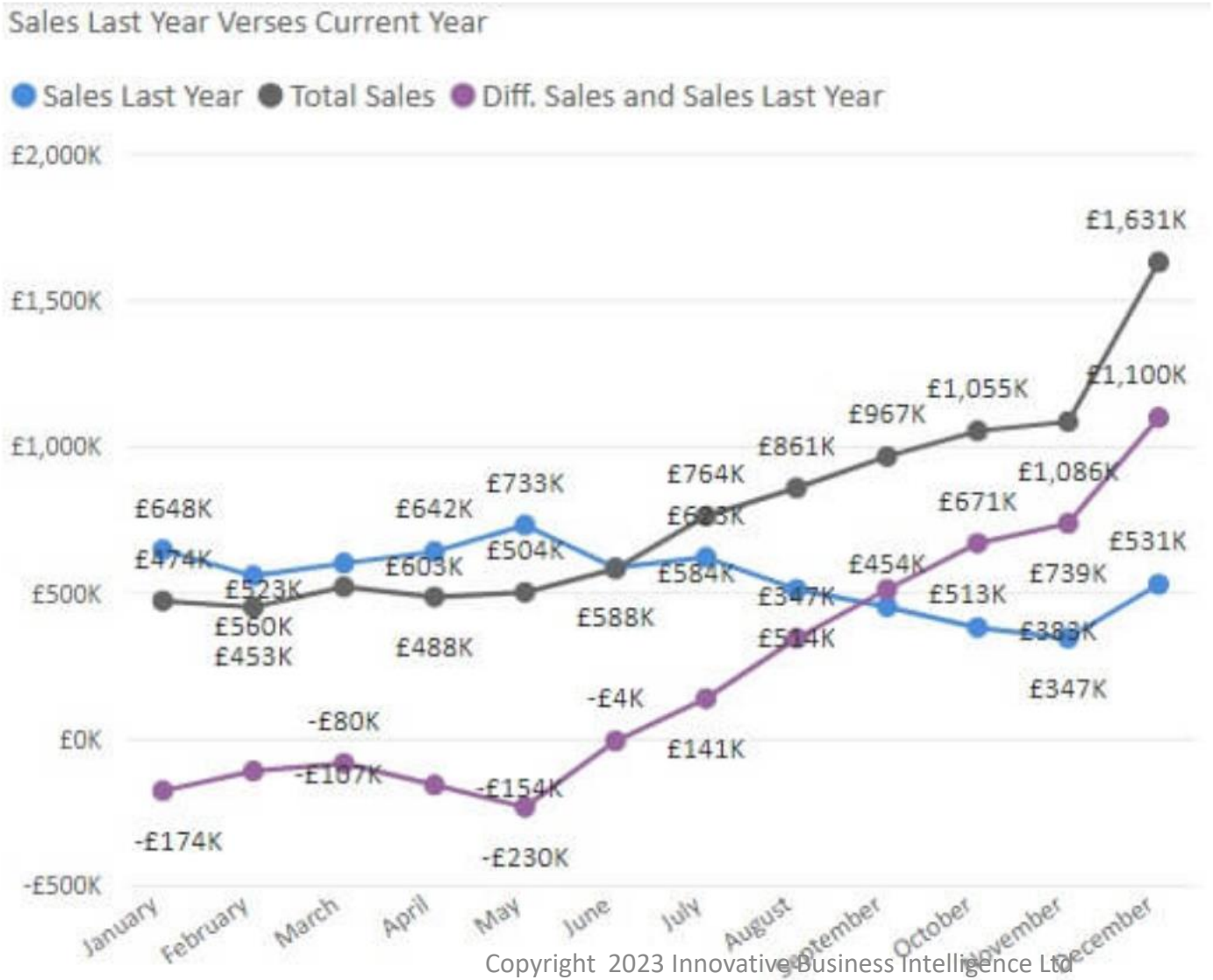
Data Visualisations



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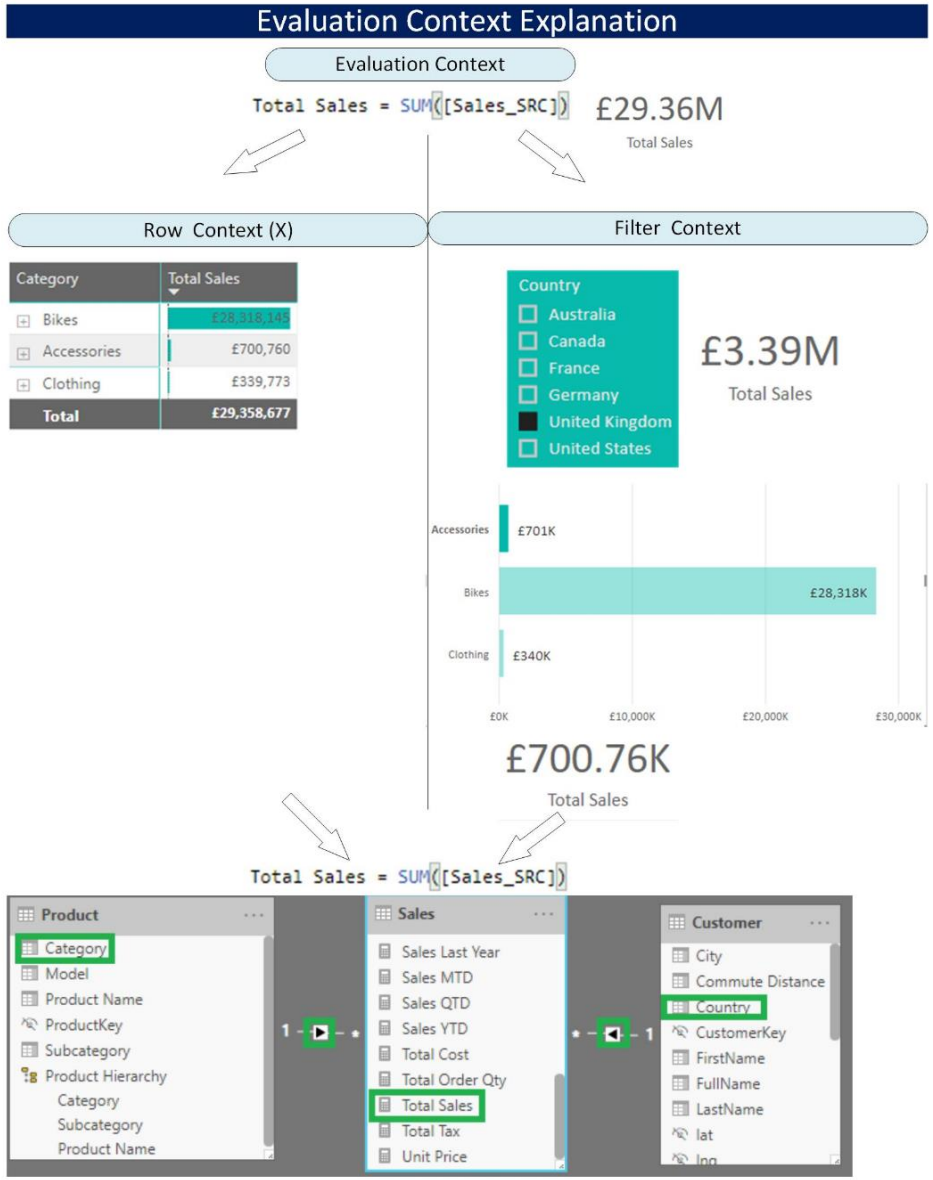
Evaluation Context

Context is Everything! The Evaluation Context within DAX is made up of Row Context and Filter Context.

Essentially to deliver commercial quality Power BI solutions you need a basic knowledge of DAX. To have a basic knowledge of DAX requires that you are able to appreciate how the evaluation context can result in the same DAX formula presenting many different values.



Banging on about the star schema again ... Using the star schema design results in fewer tables where fewer tables results in fewer relationships. The fewer the relationships the easier it is to understand the evaluation context in your data model.

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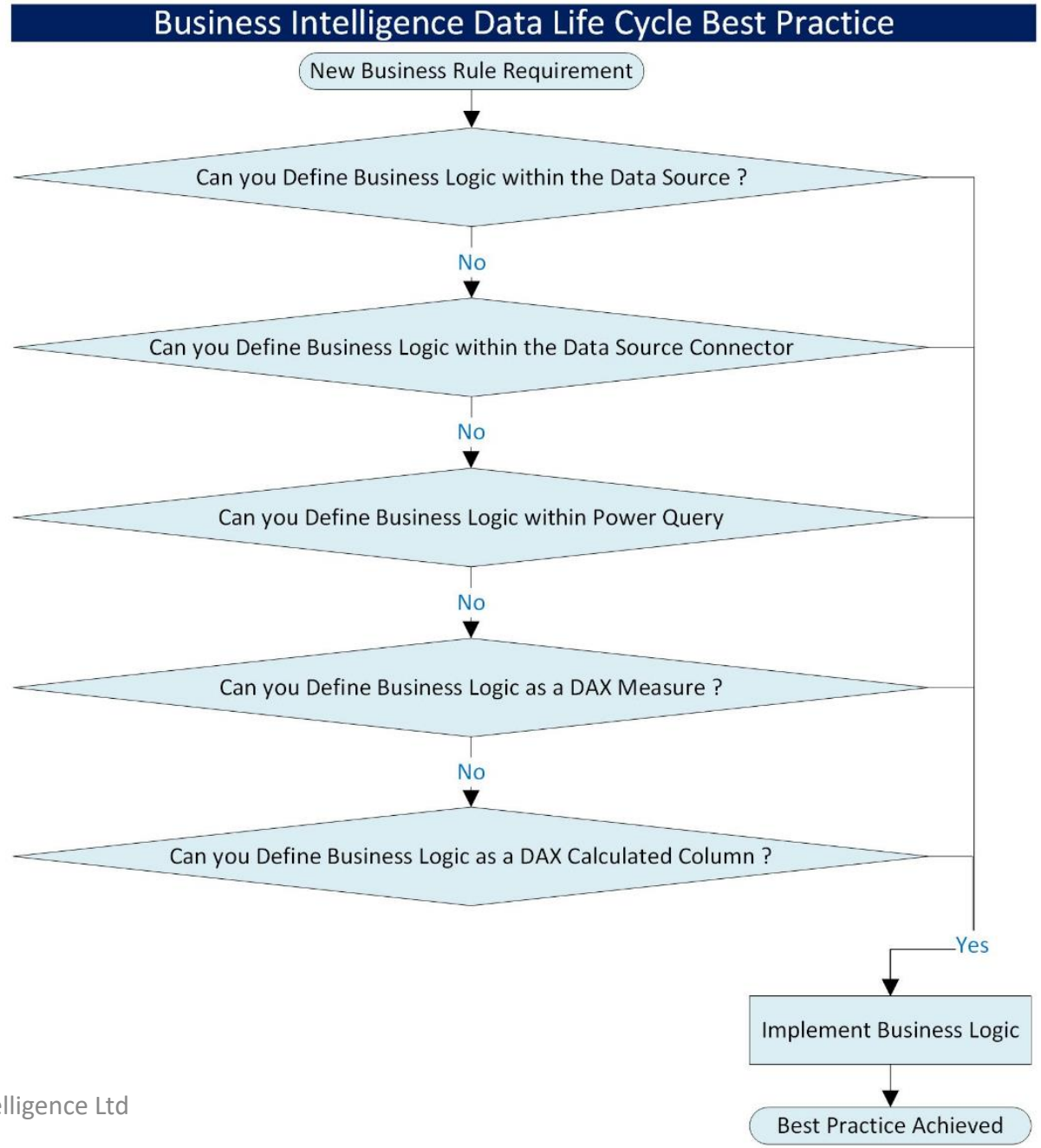
Diagram Summarising Data Life Cycle Best Practice



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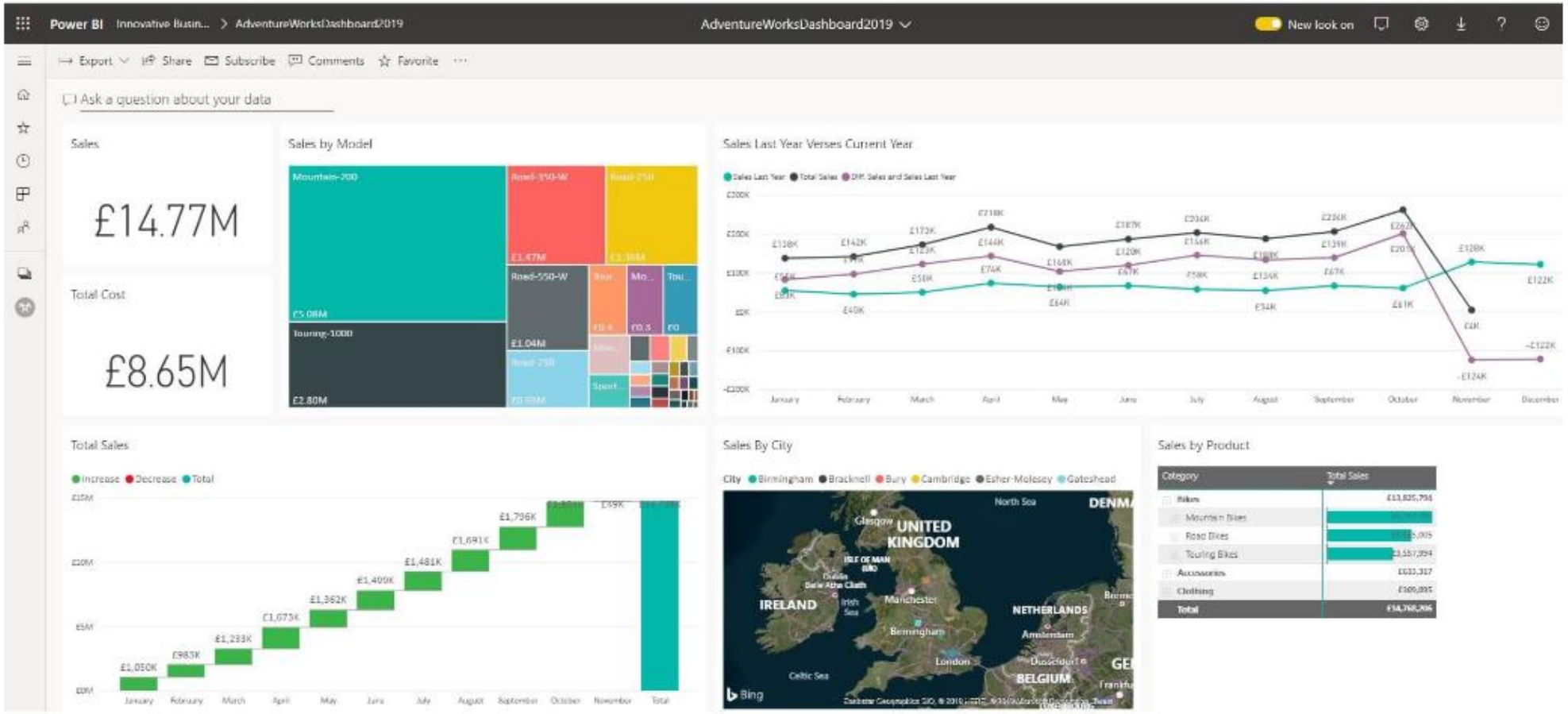
Power BI Service



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Strategic Roadmap

Deliver Dashboard of Top 10 KPIs the Board of Directors are Concerned About

Data Sources | Existing reporting solutions | Analysts | Other Stakeholders | Technical Staff

Feed into

Workshop

Requirements gathering, Timescales, Budget

Are needed for

Create Proof of Concept

to

Present Solution to Board of Directors

Results in

Feedback from Proof of Concept

+

=

Customised Training Material

To deliver

Cascade Training

Training

Agile Development Life Cycle

Will empower analysts to

Develop Further Power BI Solutions

Analysts Develop Further Power BI Solutions with Mentoring

Requirements gathering, Timescales, Budget

Load all relevant Data into One Place

OneLake

Stored commonly used data items in one place delivering single source of truth

Data Lakehouse

Shared Data, Measures, Calculations and ETL migrated to Data Warehouse

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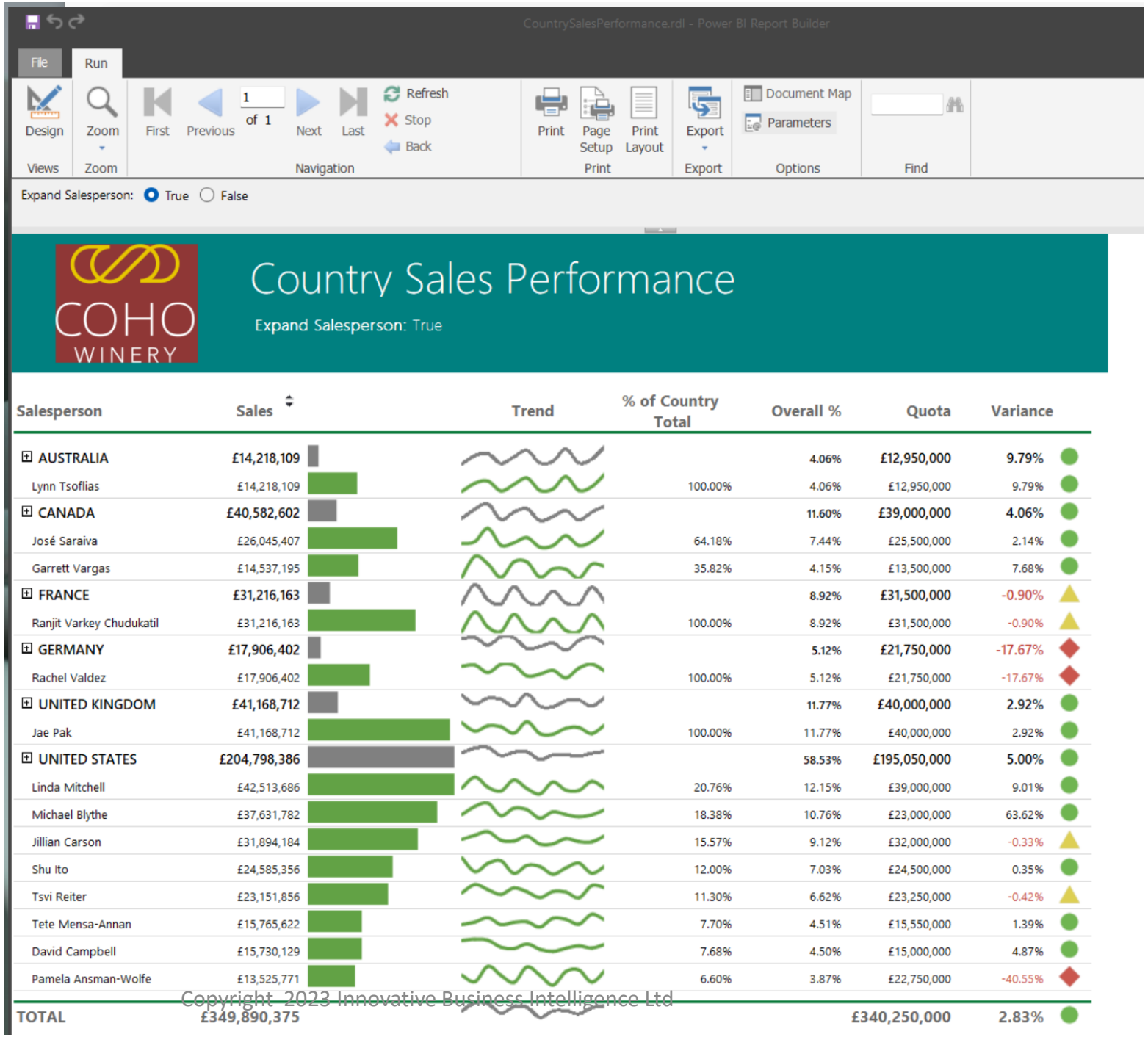
Paginated Reports



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Next Steps

- Thank you
- Please connect to me on LinkedIn … Kieran's LinkedIn Profile . If you found my training useful please provide a LinkedIn recommendation.
- Further Power BI Course Material
- Reusable DAX Patterns based on your Power BI Star Schema Model
- https://www.sqlbi.com/
- DAX Reference
- DAX Guide
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