**BIG DATA ACCESS**

Applies to OLTP, DWH Only

**When working with Database Sources (Big or Small), we have TWO Connection Modes:**

Option 1: Import : Source data imported to Power BI In-Memory database

\*\* Option 2: Direct Query : Source data retrieved LIVE by Power BI *whenever needed*

**EXAMPLE PAGE #1: HOW TO CONNECT AZURE SQL DATABASE USING POWER BI?**

LAUNCH POWER BI > GET DATA > More > Select **Azure** > **Azure SQL Database** >

**Server Name: sqlschoolprod.database.windows.net**

**Database Name: PRACTICEDATABASE**

Data Connectivity Mode: Import

Advanced Options: Set Query Execution Timeout

Paste the below Query:

SELECT T.CalendarYear, T.CalendarQuarter,T.EnglishMonthName, t.FullDateAlternateKey as day,

P.EnglishProductName AS PRODUCT, SUM(S.SalesAmount) AS TOTAL\_SALES

FROM SALES\_DATA AS S JOIN TIME\_DATA AS T ON S.OrderDateKey = T.TimeKey

JOIN PRODUCTS\_DATA AS P ON S.ProductKey = P.ProductKey

GROUP BY T.CalendarYear, T.CalendarQuarter,T.EnglishMonthName, t.FullDateAlternateKey,

P. EnglishProductName

**Load.**

**This would prompt for Authentication to the server:**

**Authentication : Database (Option #2 [left] )**

**User Name: sql\_school Password: zgrhi3216%$6**

Then above query is executed and we see that data rows are imported to PBIX file.

Right Click the resulting query (table) > Rename "AzureSalesData"

Calendar Quarter has unwanted Summary Value.

To address this: Select Calendar Quarter > Column Tools > Summary : Dont Summarize

POWER BI REPORT > PAGE 1 > INCLUDE STACKED BAR CHART > SELECT YEAR, QUARTER, SALES.

To Format Currency Values for Sales:

Select Sales Amount > Column Tools > Select $ Currency

Select Sales Amount > Column Tools > Set Precision (Decimal Values)

**EXAMPLE PAGE #2: HOW TO CONNECT SQL SERVER DATABASE USING POWER BI?**

GET DATA > SQL SERVER > SPECIFY THE SERVER DETAILS ONLY:

**Server Name: sqlschoolprod.database.windows.net**

SELECT "DIRECT QUERY"

THEN WE SEE A NEW WINDOW THAT LISTS ALL AVAILABLE DATABASES IN THE SERVER > SELECT REQURIED DATBASE > TABLE(S) {EX: SALES\_DATA, TIME\_DATA, CUSTOMER\_DATA} > LOAD.

To Verify the Query Mode [Import or Direct Query]:

Click @ outside the Visual > HOVER mouse on each Table (Query)

To Verify the relations for tables in Power BI Report:

Click @ Model Button (left @ Canvas) > We see Relations across tables. Auto Identified.

Only one active relation between a given set of tables.

To Manage the relations for tables in Power BI Report:

Click @ Model Button (left @ Canvas) > We see Relations across tables. Auto Identified.

From Top Menu Bar : Manage Relations > Select Relation > Delete or Add.

Impact of visualizing the data with un-related tables in Power BI:

Ex: AzureSalesData & Time\_Data

We see improper Report Values and Incorrect Summary Values