

Microsoft Power BI



Module Agenda



Introduction

Lesson 1: Introduction

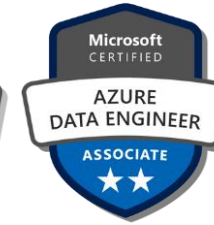


Presenter



 /arifmazumder

Mohammed Arif, PhD
Lead Data Scientist
Big Data | Machine Learning | AI



Mohammed Arif has more than fifteen (15) years of working experience in Information Communication and Technology (ICT) industry. The highlights of his career are more than six (7) years of holding various senior management and/or C-Level and had five (5) years of international ICT consultancy exposure in various countries (APAC and Australia), specially on Big Data, Data Engineering, Machine Learning and AI arena.

He is also Certified Trainer for Microsoft.



PowerBI Related Resources

<https://arif.works/powerbi>

Data Analyst Role



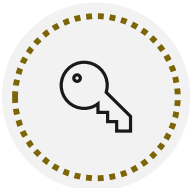
Deliver actionable insights by leveraging available data and applying domain expertise.



Collaborate with key stakeholders across verticals to identify business requirements, clean and transform the data.



Responsible for designing and building data models, reports, and dashboards using Power BI.



Have proficiency using Power Query (M) and writing expressions by using DAX.

About this Course: Objectives

Introduction

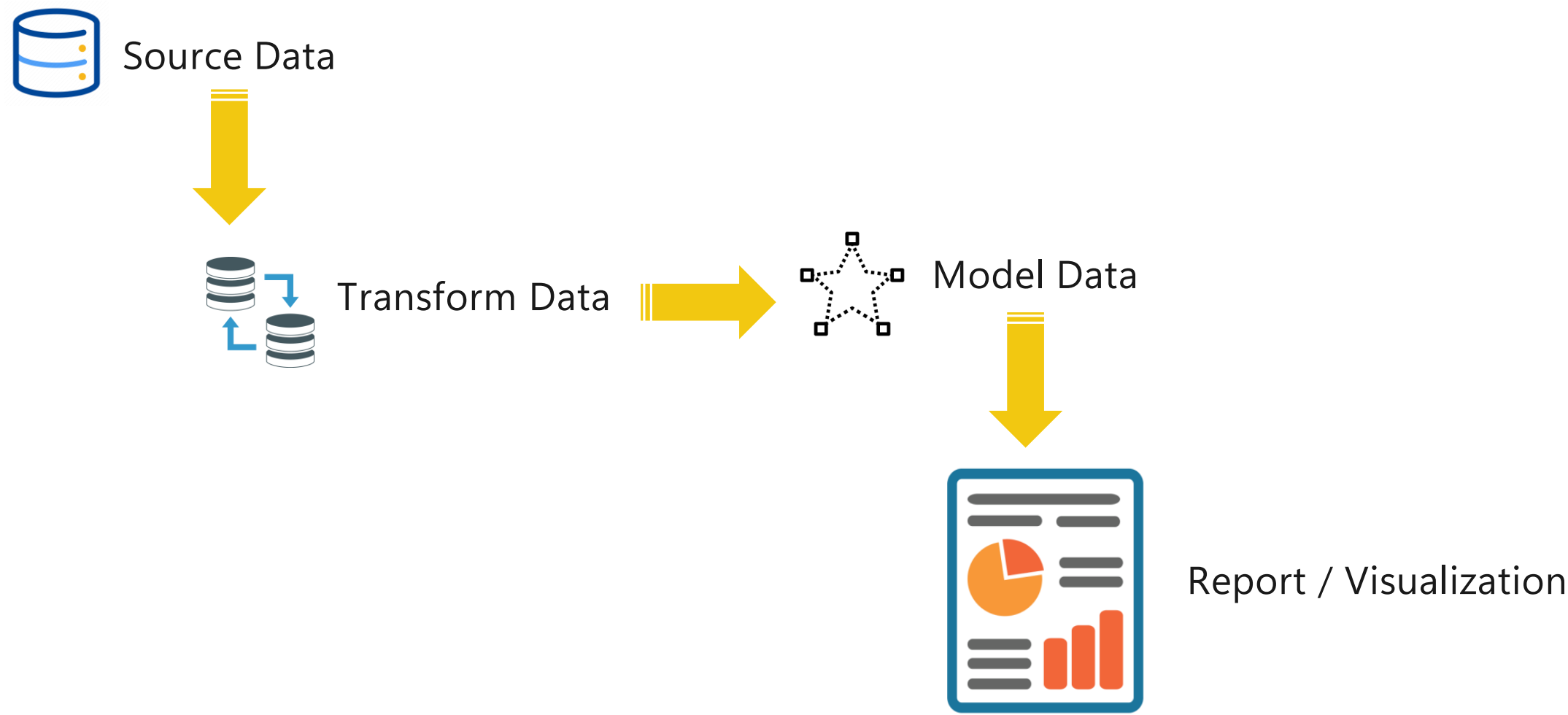
- Overview of Basic Sales Analytics Session
- Bird-eye view of Sales Data
- Getting Started with Power BI
- Get Data in Power BI and Develop Relationships
- Develop Key Calculation Table and Calculate Total Sales
- Develop Dates Table
- Calculate Total Cost and Total Profits
- Calculate Total Unit Sold, Total Products and Profit Margin Percentage
- Dashboard - Page Background with Title and key cards
- Dashboard - Slicer of Years and Quarter
- Dashboard - Total Sales by Location, Dates and Salesperson
- Dashboard - Product-wise Sales with Map and Review of Sales Performance

About this Course: Objectives

Intermediate Sales Analytics Session

- Overview of Intermediate Sales Analytics Session
- Introduction of Intermediate Sales Analytics
- Product Insight - Calculate Top 5 Products
- Product Insight - Calculate Year on Year (YoY) Sales Growth
- Product Insight - Calculate Product Group Table and place it accordingly
- Product Insight - Create Scatter Chart with Product Growth Groups
- Product Insight Dashboard - Product Table Visualization
- Product Insight Dashboard - Scatter Chart and Top Products
- Product Insight Dashboard - Final Visualization and Product Review
- Customer Insight - Calculate Top 5 Customers
- Customer Insight - Time Intelligence Calculations
- Customer Insight - Customer Ranking in the Scatter Chart
- Customer Insight Dashboard - Final Visualization and Customer Review
- Sales Summary Dashboard - Final Visualization and Sales Review
- Sales Budget - Overview and Utilization of Time Intelligence Technique
- Sales Budget - Budget Formula and Final Visualization

Basic Steps of Data Analysis



Common Jargon



Common Jargon



A **fact table** holds the data to be analyzed, and a **dimension table** stores data about the ways in which the data in the fact table can be analyzed.

A fact table **works with** dimension tables.

The fact table consists **of two types of columns**.

- The **foreign keys** column allows joins with dimension tables, and
- **Measures columns** contain the data that is being analyzed

Common Jargon

Suppose that a company sells products to customers. **Every sale is a fact that happens**, and the fact table is used to record these facts. For example:

Time ID	Product ID	Customer ID	Unit Sold
4	17	2	1
8	21	3	2
8	4	1	1



Common Jargon



Now we can add a dimension table about **customers**

Customer ID	Name	Gender	Income	Education	Region
1	Brian Edge	M	2	3	4
2	Fred Smith	M	3	5	1
3	Sally Jones	F	1	7	3

End of Introduction