1. Objective: Power BI Desktop, Cloud Service and End to End Workflow

Use Case: Design dashboard with basic set of visualizations and deploy to

Power BI Cloud Service

Source: Trips Log Entries (Excel Workbook - Lans Transport Corp)

Analytics: Develop a dashboard to show top level brief overview of Transport

Corp data using aggregated KPIs, Trends, Geo Distributions and Filters.

Dashboard: Transport Dashboard

1. KPIs for Total Miles, Revenue, Cost

2. Revenue vs. Miles by Shipping State [Trend]

3. Revenue vs. Miles by Shipping City [Map]

4. Total Trips vs. Trips by Trip Types

5. Percentage of Trips by Shipping State

6. Revenue Miles vs. Total Miles  
  
2. Objective: Visualizations, Configuring Extended Properties and Data

Calculations DAX - Introduction

Use Case: Design dashboard to make use of Power BI DAX formulas to perform

calculations.

Source: Shipping Categories and Shippers (Open Data - Northwind OData) and

Lans Transport Corp.

Analytics: Develop a dashboard to analyse scheduled deliveries of loads. Use

correlations across measures. Implement drill downs and reference lines.

Dashboard: Delivery Analysis

1. Revenue Miles vs. Total Miles by Category

2. Add Analytical Lines

3. Trips by Delivery Status by Shipper (Row Context)

4. Enable Drill Down / Drill Up Capabilities

5. [Drill Down by Level, Hierarchical Drill Down, Select Drill Down] [Record

View vs. Data View]

6. Shipping Costs vs. Revenue by Category

7. Create a Hierarchy on Location, Default Time Hierarchy

-🡪 DAX:

i) Use DateDiff Formula to get Delivery Days :

DeliveryDays=Trips[SeliveryDate]-Trips[ShipDate]  
IF(ISBLANK(DeliveryDate]),0,Trips[DeliveryDate}-Trips[ShipDate])

DeliveryStatus =IF(ISBLANK(Trips[DeliveryDate],”Undelivered”,(Trips[Deliver IF[DeliverDays]=Trips[ShipDays],”OnTime”, IF(Trips[DeliveryDays]<Trips[ShipDays],”Early”,”Late”)

3. Objective: Combination visualizations for correlated value columns.

Use Case: Design dashboard to make use of Power BI DAX formulas and perform calculations.

Source: Shipping Categories and Shippers (Open Data - Northwind OData) and Lans Transport Corp.

Analytics: Create bucketed categories to represent value measures on categories axis. Use scatter plot to identify outliers or outperformers.

Dashboard: Delivery Analysis

1. Trips by Shipping Days binned by Trip Type (Create Table)

2. Delivery Days vs. Due Days

3. Delivery Days vs. Due Days by DestinationCity

4. KPIs for Cost Per Miles, Revenue Per Miles, On Time Deliveries, Avg. Miles Per Trip (Set Context)

🡪 DAX CALCULATIONS:  
**MEASURES:**

Revenue Per Load = sum(Trips[Revenue])/COUNT(Trips[TripID])

Revenue Per Mile = DIVIDE(SUM(Trips[Revenue]),SUM(Trips[LoadedMiles]))

Dead Miles = SUM(Trips[TotalMiles])-SUM(Trips[LoadedMiles])

% Dead Miles = DIVIDE(Trips[Dead Miles],SUM(Trips[TotalMiles]))\* 100

Cost Per Mile = SUM(Trips[ShippingCost])/SUM(Trips[TotalMiles])

Profit per Mile = Trips[Revenue per Mile]-Trips[Cost per Mile]

% Profit = Trips[Profit per mile]/Trips[Revenue Per Mile]\*100