Problem statement – creating the sales dashboard for AdventureWorks Sales for month of June 2008.

Steps taken –

Data sources – combined the data from SQL server, Excel, Web.

- Connected to AdventureWorksLT SQL database and written the SQL query to load the data in power query in PowerBI. Perform the data preparation operations such as renaming columns, creating calculated columns, creating measure. Renamed the queries to Customers and Sales. Create relation between the 2 tables in model view to access the sales data according to customers.
- Combine the data from web (States with Code) – got the US states code from web and imported in power query, removed unwanted rows and columns,
- Imported data from excel for US states sales – performed the merge query in query editor to merge this data with the data loaded from web.

Visualisations –

Used clustered bar chart, clustered column chart, donut chart, gauge, funnel chart, map. Published the report to PowerBI service.

Insights –

- Number of customers are more in UK, hence steps need to be taken to increase number of customers in US.
- Sales need to be increased in US.
- London is the city where there are maximum customers hence there is need to increase customers in other cities as well.
- Number of customers and sales are very less for accessories and clothing hence there is need to focus on these categories.
- Target for orders was set to 500, bikes and clothing have exceeded the target with the number of orders of 683 and 606 respectively. But components and accessories didn't achieve the target.
- From the US state sales map it is seen that Utah and Nevada are having least sales, hence there is need of product promotion in these states.
- Sales target was set to $1.24M but sales in June were $1.22M hence the target was not achieved.
- Bikes have highest number of sales, orders and customers.

Topics learned –

- Importing and combining data from different data sources.
- Performing data preparation operations in power query such as editing the columns, adding new columns, concatenating columns, adding measures, merging 2 tables.
- Data modelling - Creating relation between 2 tables to retrieve correct data.
- Creating visualizations in simple way to communicate the insights with non-technical stake holders.
- Finding insights from visualisations and data.
- Publishing the report to powerBI service.