**Final Project**

Power BI

**Problem Statement:**

Data is continually published either internally by the company or on the web by external sources. We need to be able to refresh our data easily and report on it. We need an easy way to be able to analyze the data and create visualizations that are targeted towards specific user groups.

**Overview of the Technology:**

## Power BI is a suite of business analytics tools that deliver insights throughout your organization. Connect to hundreds of data sources, simplify data prep, and drive ad hoc analysis. Produce beautiful reports, then publish them for your organization to consume on the web and across mobile devices. Everyone can create personalized dashboards with a unique, 360-degree view of their business. And scale across the enterprise, with governance and security built-in.

In this project, I have used just one data source but have split it into multiple .csv files(one per each year with data) and also created a Windows PowerShell script to continually refresh power BI dataset from these files using the Power BI API. In the Power BI app, I have also created reports and dashboards that provide different views of the same data.

**High Level Steps:**

1. Download data and split it into multiple files by year
2. Installed PowerShell module PowerBIPS
3. Created PowerShell script to upload .csv file from local file system to Power BI
4. load to Power BI dataset one file at a time to show dataset refresh.
5. Created reports and dashboards in Power BI app.

**Data Source:**

<https://catalog.data.gov/dataset/age-adjusted-death-rates-for-the-top-10-leading-causes-of-death-united-states-2013>

**Hardware Used:**

Windows 7 64 bit processor laptop

**Software Used:**

Windows PowerShell

**Lessons Learnt:**

**Pros:**

* Visualizations are easy to create and there is a wide variety of visualizations that can be downloaded from the marketplace within Power BI app.
* Reports and dashboards can be easily refreshed with every data refresh.

**Cons:**

* Documentation on calling Power BI API using PowerShell is limited.
* The Power BI API does not allow refresh of dataset if the dataset was created within the Power BI App instead of being created via the API.

**GitHub Link:**

<https://github.com/vasaviramesh/AzureLearning/tree/master/FinalProject>

**YouTube Links:**

2 Min: <https://youtu.be/rxLlbJBK3AY>

15 Min: <https://youtu.be/UjSxATsSgrw>