

Ex08

Introduction: As one of the BI tools, Power BI provides few Intelligence features

Objective: This exercise is to demonstrate and explain the following Power BI features

- **Analytics**
- **Key Influencer**
- **Q & A**

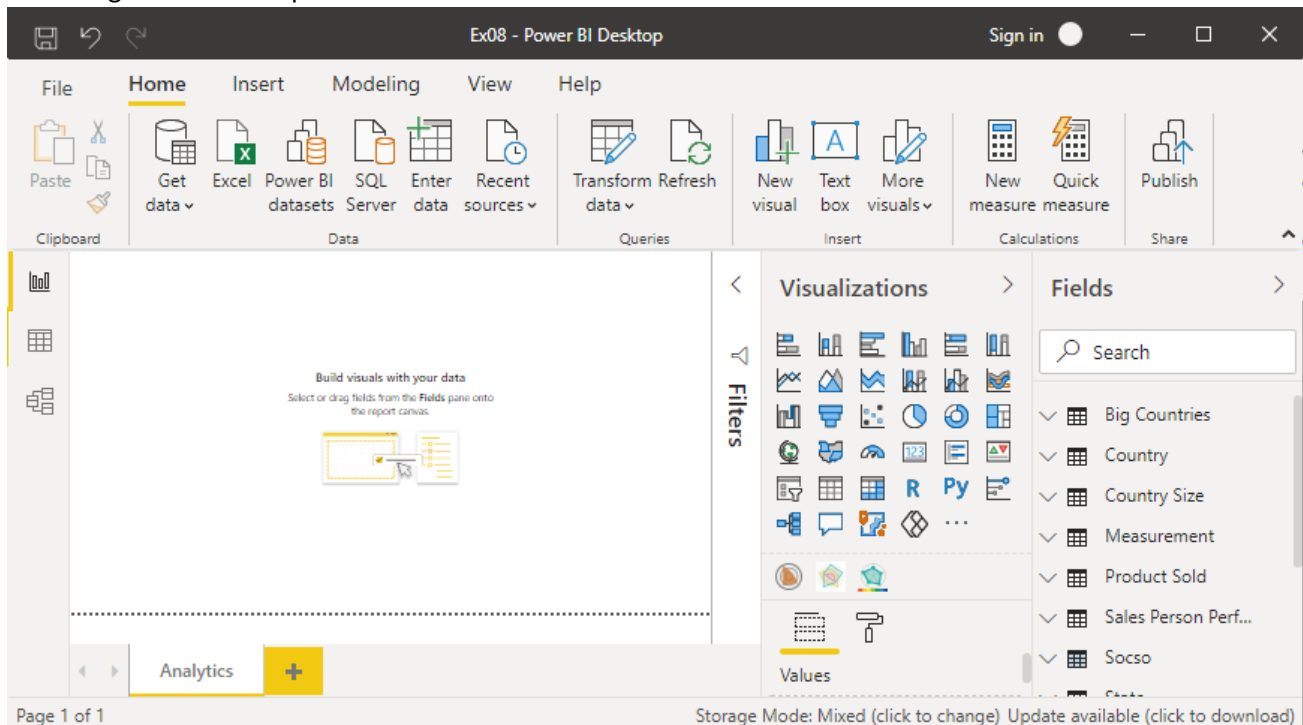
Pre-requisites:

- 1) Understand how to perform data loading from MS Excel
- 2) Know how to transformation data
- 3) Be able to construct Data Model
- 4) Familiar with Power BI Reporting

Steps:

Part-1: Prepare Data Workbook and create Data Model

1. This exercise will use the same data model created from Ex07. Just make a copy of Ex07.xlsx, the rename it as Ex08.xlsx.
2. Copy Ex07.pbix to Ex08.pbix.
3. Open Ex08.pbix, reassign the data source to Ex08.xlsx.
4. Empty “Bookmark” page and delete other report pages
5. Rename the empty “Bookmark” page as “Analytics”.
6. Delete all bookmarks.
7. Delete all roles.
8. Following is the state report:



Part-2: Prepare Report Pages

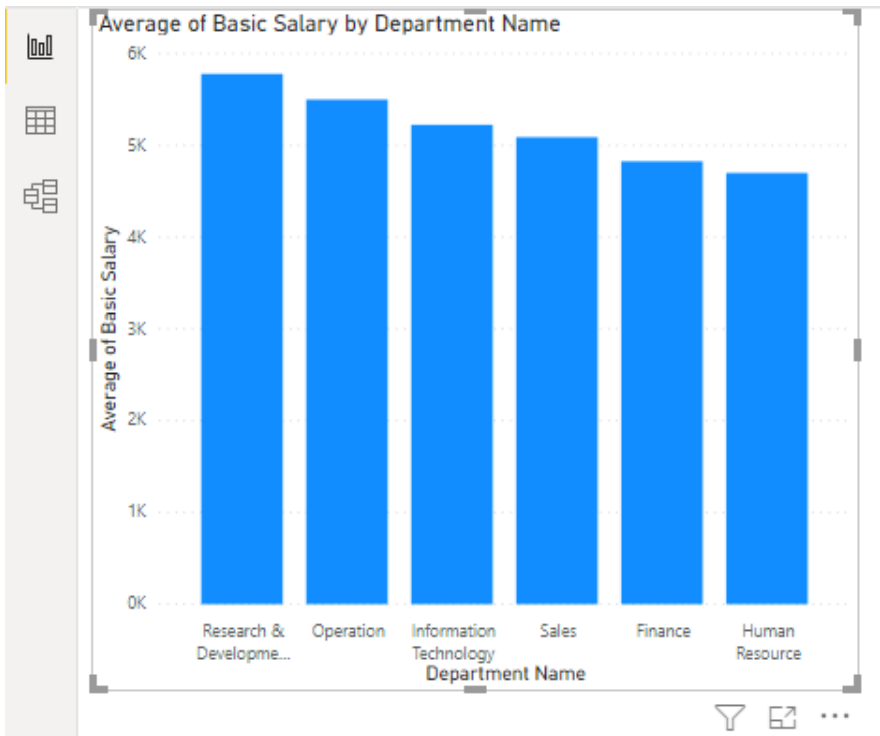
Analytics

Steps:

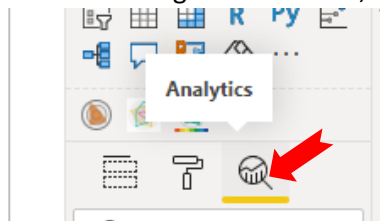
1. Add a Clustered Column Chart with properties:

The screenshot shows the configuration pane for a clustered column chart. The 'Axis' section has 'Department Name' selected, with a red callout box pointing to it containing the text `'TblDepartment'[Department Name]`. The 'Values' section has 'Average of Basic Salary' selected, with a red callout box pointing to it containing the text `Average of 'TblEmployee'[Basic Salary]`.

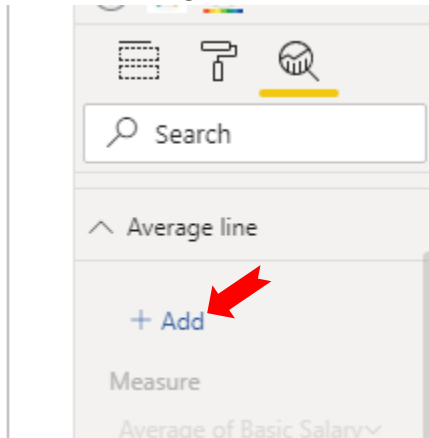
2. The Chart:



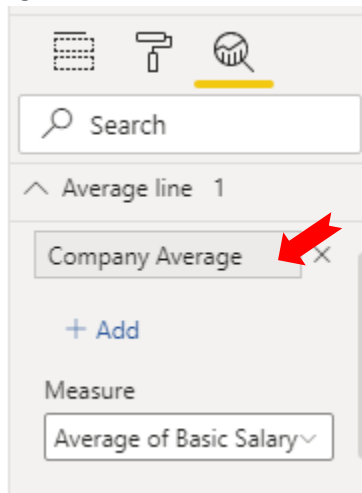
3. While selecting the new chart, select "Analytics":



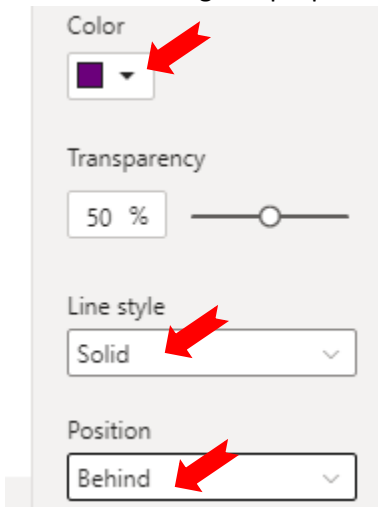
4. Add new "Average line":



5. Change name to with name "Company Average":



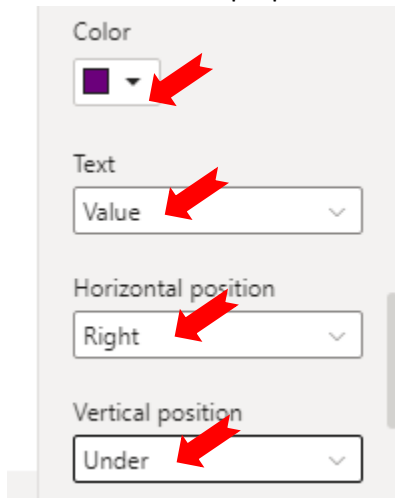
6. Set the following line properties:



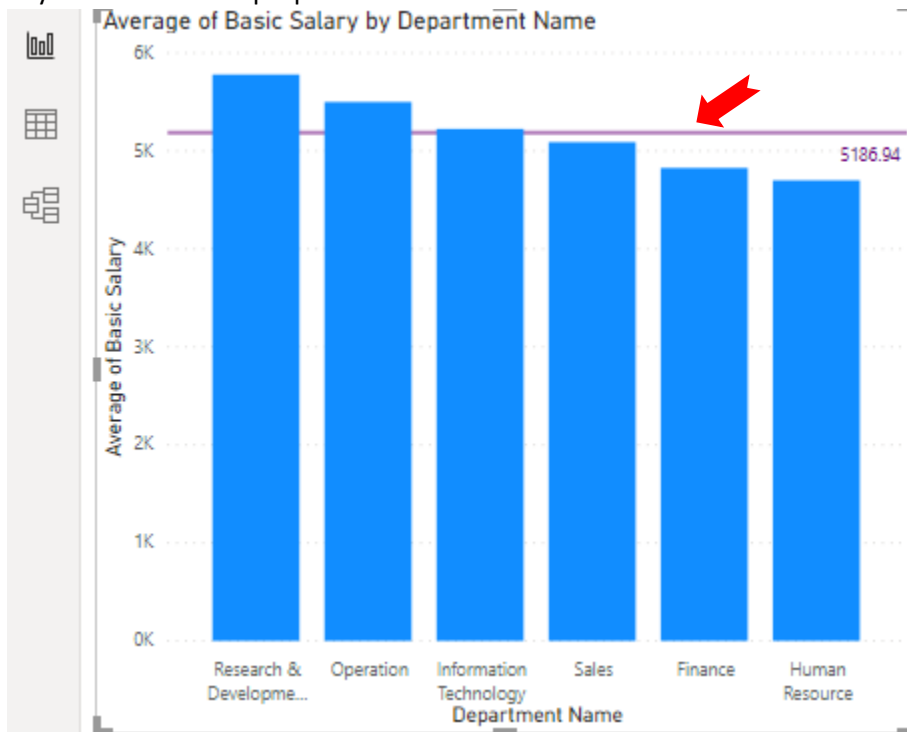
7. Turn on the Data Label:



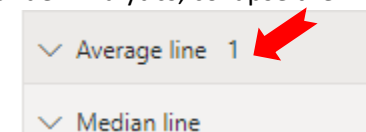
8. Set the Data Label properties:



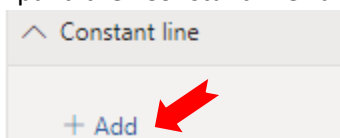
9. Pay attention to the purple line on the Chart:



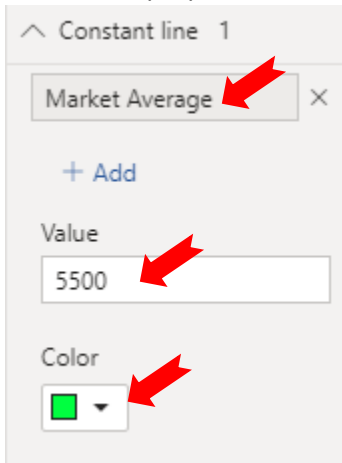
10. Under Analytics, collapse the "Average line 1":



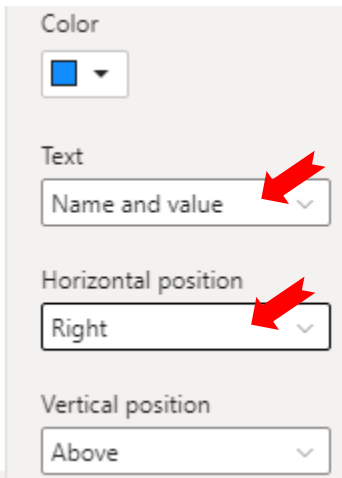
11. Expand the "Constant line" and select "Add":



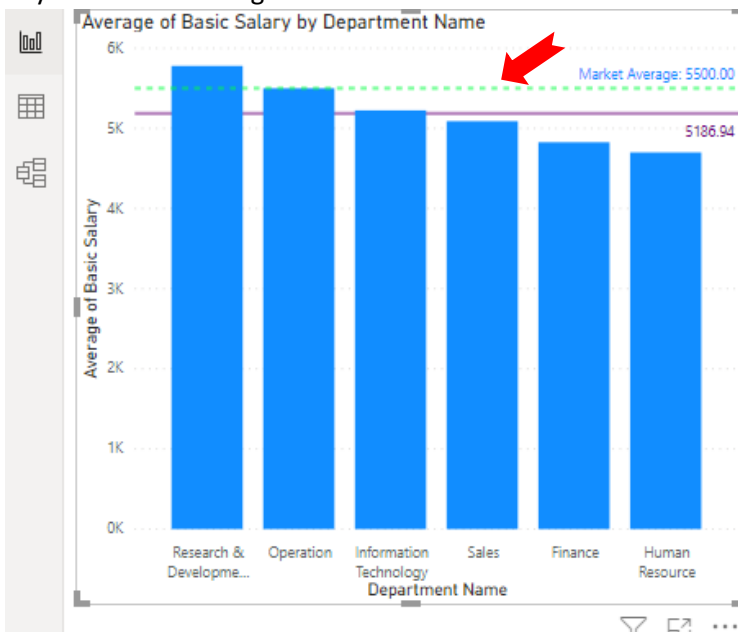
12. Set the line properties:



13. Turn on the Data Label and set properties:



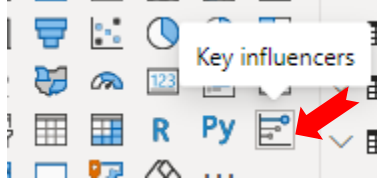
14. Pay attention to the green line on the chart:



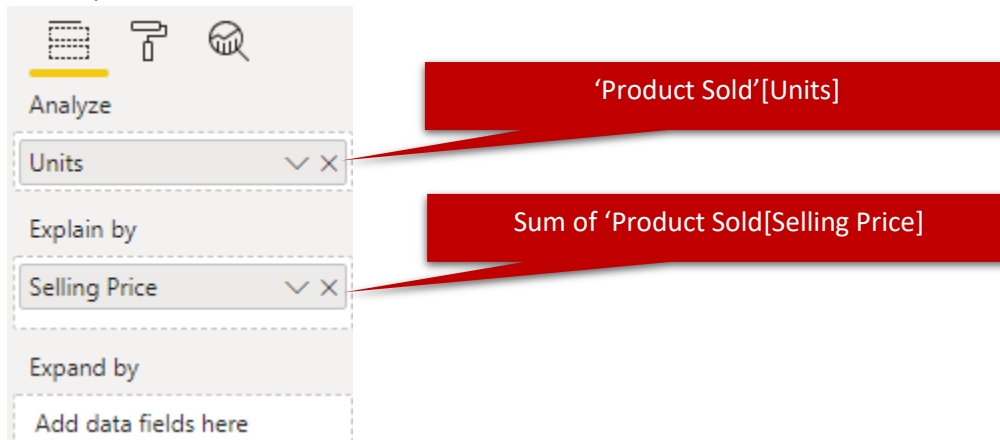
Key Influencer

Steps:

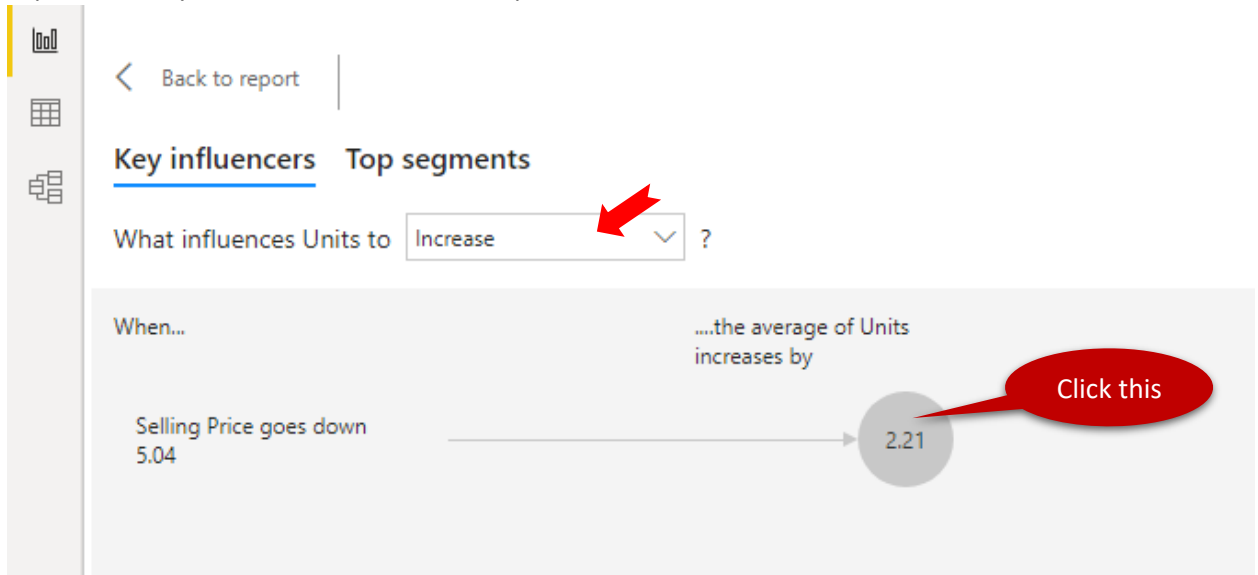
1. Create a new Report Page with name "Key Influencer".
2. Add a new "Key Influencer" to the page:



3. Set Properties:



4. Expand the Key Influencer, and set the dropdown to "Increase":



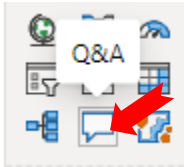
5. Minimize the Key Influencer.

Q & A

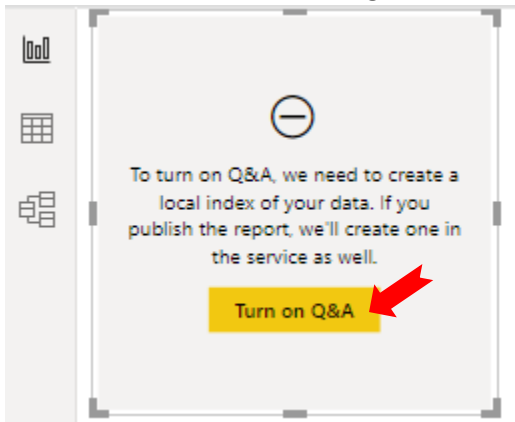
Steps:

Notes: NLP (Natural language Processing) is one of the Key area of Artificial Intelligence.

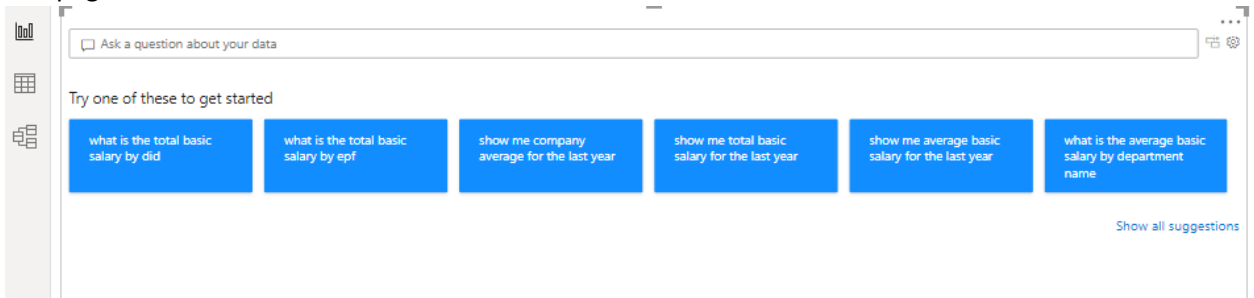
1. Create a new page with name "Q & A".
2. Add a new Q & A element:



3. Click "Turn on Q&A" and enlarge it:



4. The page:



5. Try the following Questions:

1	What is the average age of IT?
2	What is the average age of IT male?
3	Show the average salary by Departments
4	Show the average salary by gender in Pie
5	Who has the highest basic salary?
6	What is the name of the youngest employee?
7	Show employee names and age sorted by age in table
8	Show employee name and department name in table
9	Female employee name is having highest basic salary
10	Total basic salary for each race in clustered column chart