

Career Development Dashboard

1. Data Loading and Preparation

a. Import Dataset

- Open Power BI Desktop.
- Go to Home > Get Data > Excel /CSV and import your dataset.

b. Data Cleaning

- Review the dataset for any missing or inconsistent data.
- Copy and paste the Job satisfaction column and change the type to text and continue by replacing the field data accordingly.

2. Data Transformation

a. Convert Job Involvement to Text Format

- Open Power Query Editor by clicking on Edit Queries.
- Locate the Job involvement column.
- In the Home tab > Data > Go to data type and click down arrow > select text format

b. Convert Job satisfaction to Text Format and replace the values

- Open Power Query Editor by clicking on Edit Queries.
- Locate the Job satisfaction column.
- In the Home tab > Data > Go to data type and click down arrow > select text format
- Select the column > Home tab > go to Transform panel > select Replace values > change accordingly

3. Data Modeling

a. Create Measures (for KPIs)

• Attrition Rate:

$$\text{Attrition Rate} = \text{DIVIDE}(\text{COUNTROWS}(\text{FILTER}('WA_Fn_UseC_HR_Employee_Attrition', 'WA_Fn_UseC_HR_Employee_Attrition'[\text{Attrition}] = "yes")), \text{COUNTROWS}('WA_Fn_UseC_HR_Employee_Attrition')), 0) * 100$$

• Years_at_company:

$$\text{Years_at_Company} = \text{AVERAGE}(WA_Fn_UseC_HR_Employee_Attrition[\text{YearsAtCompany}])$$

• Years_in_currentrole:

$$\text{Years_in_currentrole} = \text{AVERAGE}(WA_Fn_UseC_HR_Employee_Attrition[\text{YearsInCurrentRole}])$$

• Years_since_last_promotion:

$$\text{Years_since_last_promotion} = \text{AVERAGE}(WA_Fn_UseC_HR_Employee_Attrition[\text{YearsSinceLastPromotion}])$$

4. Dashboard Design

a) years_at_company Card visual:

- Add a card visual.
- Drag the years_at_company field to the Values area of the card.
- Customize the card to display average years_at_company.

b) years_in_currentrole Card visual:

- Add a card visual.
- Drag the years_in_current_role field to the Values area of the card.
- Customize the card to display average years_in_current_role.

c) years_since_lastpromotion Card visual:

- Add a card visual.
- Drag the years_since_lastpromotion field to the Values area of the card.
- Customize the card to display average years_since_lastpromotion.

d) column chart to display job role across education field:

- Add a column chart visual.
- Drag the job role field to the y-axis of the column chart.
- Drag the education field into x-axis area of column chart.
- Customize the column chart to display job role across education field accordingly.

e) Bar Chart to display Employees at each education level:

- Add a bar chart visual.
- Drag the education field to the Y-Axis area of the bar chart.
- Drag the employee Id field into X-Axis area of bar chart.
- Customize the bar chart to display Employees at each education level accordingly.

f) Pie chart to display % of employees at education field:

- Add a pie visual.
- Drag the employee id field to the Values area and the education field into legend area of the pie chart.
- Customize the pie chart to display % of employees at education field accordingly.

g) Tree Map to display Hierarchical view of education distribution by job role:

- Add a tree map visual.
- Drag the education field to the category area of the chart.
- Drag the Job role field into values area of chart.
- Customize the chart to display Hierarchical view of education distribution by job role accordingly.

h) Scatter chart to display performance rating by education:

- Add a scatter plot visual.
- Drag the education field into X-Axis area of chart.
- Drag the performance rating field into Y-Axis area of chart.
- Customize the chart to display performance rating by education accordingly.

i) Heat Map Table using Matrix Visual to display % salary hike since last promotion by education

- Add a matrix visual
- Drag education field to rows area of chart
- Drag years_since_last_promotion field to columns area of chart
- Drag performance salary hike field to values area of chart
- Customize the chart to display % salary hike correlation since last promotion by education

5. Final Touches

a. Formatting

- Apply consistent colours, fonts, and styles across visuals.
- Add titles, axis labels, and legends to enhance readability.

b. Tooltips and Interactivity

- Add tooltips to provide additional information on hover.
- Ensure slicers and filters interact with all related visuals for a dynamic dashboard.

c. Testing

- Test the dashboard with different filter selections to ensure accurate data representation.

Conclusion for Career Development Analysis:

The career development Analysis dashboard provides valuable insights into the factors affecting career development within the dataset. Through this analysis, several key findings and implications emerge:

1. Educational Progression:

The data shows a trend toward higher educational attainment over time, reflecting the organization's emphasis on employee development and continuous learning.

2. Correlation Between Education and Advancement:

Employees with higher educational qualifications experience more frequent promotions and salary increases, highlighting the value of advanced education for career growth.

3. Departmental Career Growth:

Certain departments offer more opportunities for career advancement, suggesting best practices that can be shared across the organization to foster growth in other areas.

4. Training and Development Needs:

The analysis identifies gaps in career development, pointing to specific areas where additional training and development programs could be beneficial.

5. Retention Strategies:

By understanding the career development patterns, the organization can create targeted retention strategies to keep top talent engaged and motivated, reducing turnover.

These insights can guide HR and management in making informed decisions to enhance career development programs, improve employee satisfaction, and optimize workforce planning.