

Employee Data Analysis using Excel



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PROJECT TITLE

**Employee Performance Analysis
using Excel**

AGENDA

1. Problem Statement
2. Project Overview
3. End Users
4. Our Solution and Proposition
5. Dataset Description
6. Modelling Approach
7. Results and Discussion
8. Conclusion



PROBLEM STATEMENT

Develop an Excel-based tool to systematically analyze employee performance data, track key metrics, and generate actionable insights for improved decision-making and productivity.



PROJECT OVERVIEW

•The project involves creating an Excel-based tool designed to streamline employee performance analysis. This tool will collect and organize key performance data, such as productivity metrics and project outcomes, allowing for comprehensive tracking and evaluation. Advanced Excel functions will be used to analyze this data, identify trends, and uncover insights. The resulting reports will provide clear visualizations and actionable insights to support informed decision-making. Ultimately, this tool aims to enhance performance management and support strategic HR decisions by offering a user-friendly and data-driven approach.



WHO ARE THE END USERS?

The end users are HR managers, department managers, team leaders, executives, and potentially employees seeking insights into performance data.

OUR SOLUTION AND ITS VALUE PROPOSITION



TECHNIQUES USED IN EXCEL

- Conditional formatting – to highlights the missing values
- Filter – to remove the highlighted cells
- Formula – to make performance category by using IFS formula
- Pivot – to make summary of employee data set
- Graph – to show the important information in data visualization

Dataset Description

The dataset categorizes employee counts by performance ratings (HIGH, LOW, MEDIUM, VERYHIGH) across different departments, with a total of 3,000 records.



THE "WOW" IN OUR SOLUTION

- Start by creating a separate sheet for the dashboard.
- Use PivotTables and Pivot Charts to dynamically display data.
- Integrate slicers and interactive elements for a user-friendly experience.
- Utilize advanced chart types like heat maps, radar charts, and bullet graphs.
- Finally, add narrative text boxes to provide insights and explain the data.



MODELLING

1. Understand the Data:

- **Rows (Row Labels):** Represents different departments or categories (e.g., BPC, CCDR, etc.).
- **Columns (Column Labels):** Represents performance levels (HIGH, LOW, MEDIUM, VERYHIGH, and a blank category).
- **Values:** The numbers represent the count of employees in each performance category for each department.

2. Calculate Percentages:

- **Add a new column** next to each performance level to calculate the percentage of employees in each category within each department.
- **Formula:** $= (\text{Category Count} / \text{Grand Total for that Row}) * 100$

3. Use Conditional Formatting:

- **Apply Conditional Formatting** to highlight performance categories. For example, use green for HIGH, red for LOW, and yellow for MEDIUM. This will help visually identify trends.

4. Create Charts:

- **Bar Chart or Column Chart:** To compare the distribution of performance levels across departments.
- **Pie Chart:** For each department, to show the percentage of employees in different performance categories.
- **Stacked Bar Chart:** To show the distribution of all departments together, where each bar represents a department and is divided into segments representing each performance category.

5. Pivot Table Analysis:

• Create a **Pivot Table** if not already done, to dynamically analyze the data. You can filter by GenderCode or other factors to see how performance varies.

6. Trend Analysis:

• Use a **Line Chart** to observe trends over time if the data spans across different periods. This would require adding a time dimension to your data.

7. Advanced Analysis (Optional):

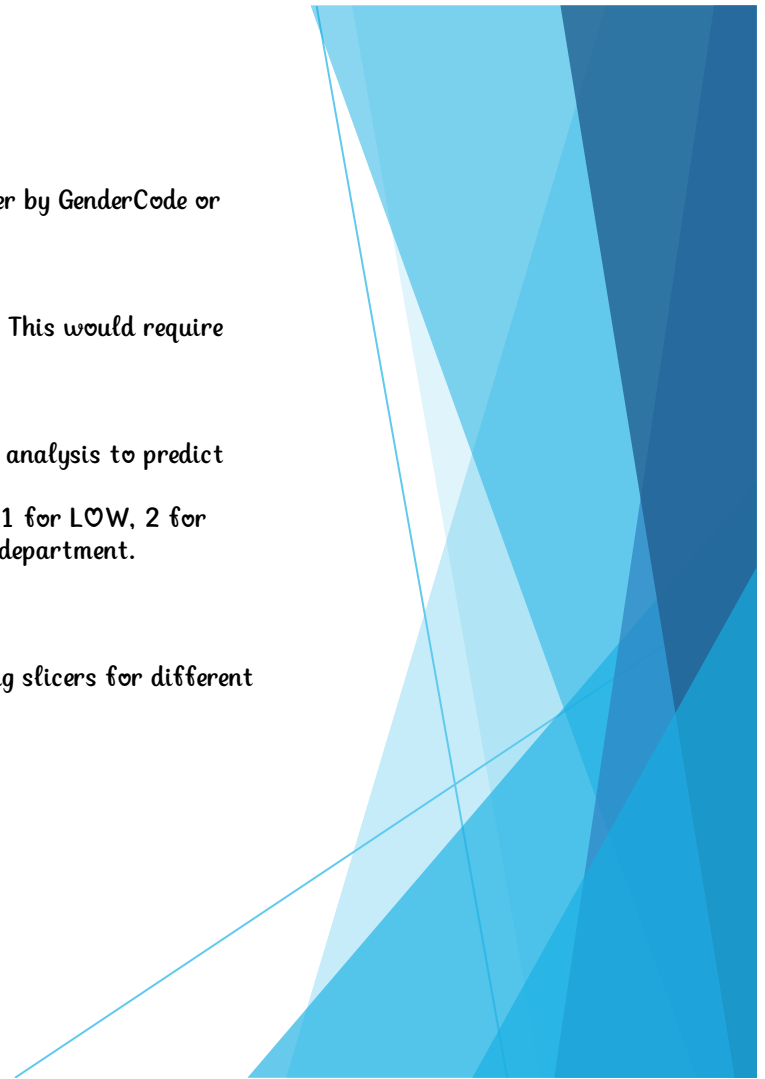
• **Regression Analysis:** If you have more data (like time series), you can perform regression analysis to predict future performance.

• **Employee Performance Index:** Create an index based on weightage for each category (e.g., 1 for LOW, 2 for MEDIUM, 3 for HIGH, and 4 for VERYHIGH) and calculate a performance score for each department.

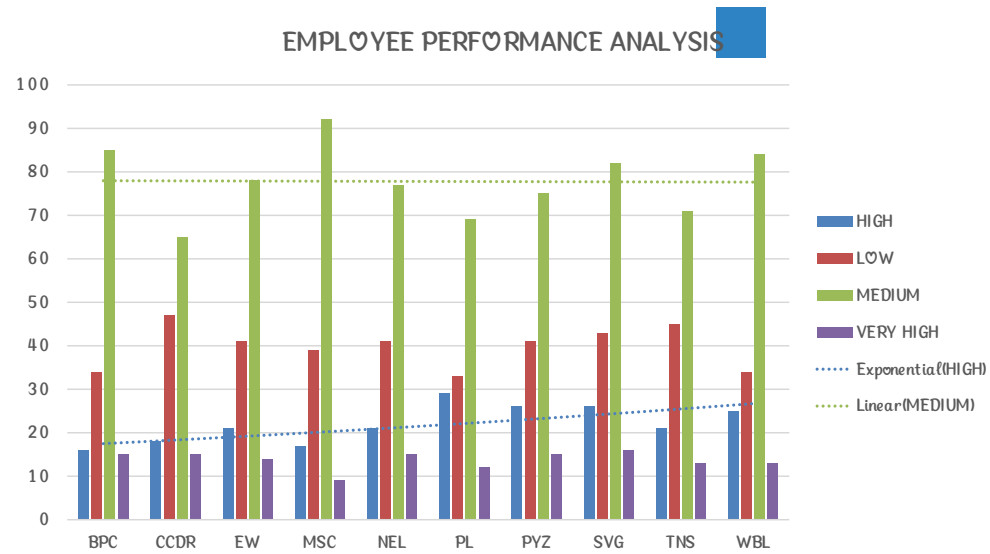
8. Report and Dashboard:

• Summarize the insights from your analysis into a report.

• You can also create a **Dashboard** in Excel to make it easy to interact with the data using slicers for different categories like GenderCode, departments, etc.



RESULTS



conclusion

The employee performance analysis highlights that the majority of employees are in the MEDIUM category, with fewer in the HIGH and VERYHIGH categories. Departments like MSC and SVG show strong performance, while CCDR and TNS have more employees in the LOW category, indicating potential areas for improvement. A significant number of employees are unclassified, suggesting a need for better data management. To improve overall performance, targeted interventions in lower-performing departments and the adoption of best practices from high-performing ones are recommended. Addressing data gaps and regular monitoring will be essential for continuous improvement.

