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

Analyze employee performance using Excel to identify strengths, weaknesses, and trends based on productivity, attendance, and feedback metrics.

PROJECT OVERVIEW

The goal is to use Excel for a comprehensive analysis of employee performance. By examining productivity, attendance, and feedback data, the objective is to identify performance trends, strengths, and areas needing improvement. This analysis aims to inform decision-making, enhance employee development, and improve overall organizational efficiency.

WHO ARE THE END USERS?

1. HR Managers
2. Department Managers
3. Senior Executives
4. Team Leaders
5. Employees
6. Performance Review Committees

OUR SOLUTION AND ITS VALUE PROPOSITION

1. Filter – For removing missing values
2. Formula – Performance level calculation
3. Conditional Formatting – For missing values
4. Pivot table – For summary of values
5. Graph – For data visualization

Dataset Description

Employee Dataset – From Kaggle.
There were 26 features in the dataset for this analysis we have taken 9 features into consideration.
The 9 features are as follows:

1. EMP ID – Num
2. First Name – Text
3. Last Name - Text
4. Emp type – Text
5. Performance level – Text
6. Emp Rating – Num
7. Gender – M/F
8. Emp Status – Text
9. Business Unit – Text

THE "WOW" IN OUR SOLUTION

Performance level=IFS(Z9>=5,"VERY HIGH",Z9>=4,"HIGH",Z9>=3,"MED",TRUE,"LOW")

Unlock actionable insights with visual dashboards, trend identification, and customizable reports. Enhance decision-making and efficiency with precise, data-driven performance analysis.

MODELLING

- Data Collection : The dataset utilized for this analysis was sourced from Kaggle, a popular platform for data science competitions and datasets. This dataset provided a rich source of information relevant to employee performance, offering a comprehensive set of attributes necessary for in-depth analysis.

- Feature Selection : In the initial phase of analysis, we focused on selecting key attributes directly related to employee performance. This involved identifying and highlighting specific features that would provide meaningful insights into various aspects of performance. By narrowing down the attributes to those most relevant, we ensured that the analysis would be both targeted and effective.

- **Identification of Null Values**: An important step in data cleaning was identifying and managing null values within the dataset. Using conditional formatting and the filter option in Excel, we were able to visually highlight and isolate cells with missing data. This allowed us to address these gaps appropriately, either by imputing values or excluding incomplete records to maintain the integrity of the analysis.
- **Performance Level Calculation**: To assess employee performance, a new formula was developed and applied across the dataset. This formula integrated various performance metrics to compute a comprehensive performance level for each employee. By standardizing this calculation, we ensured consistency in how performance was measured and compared.

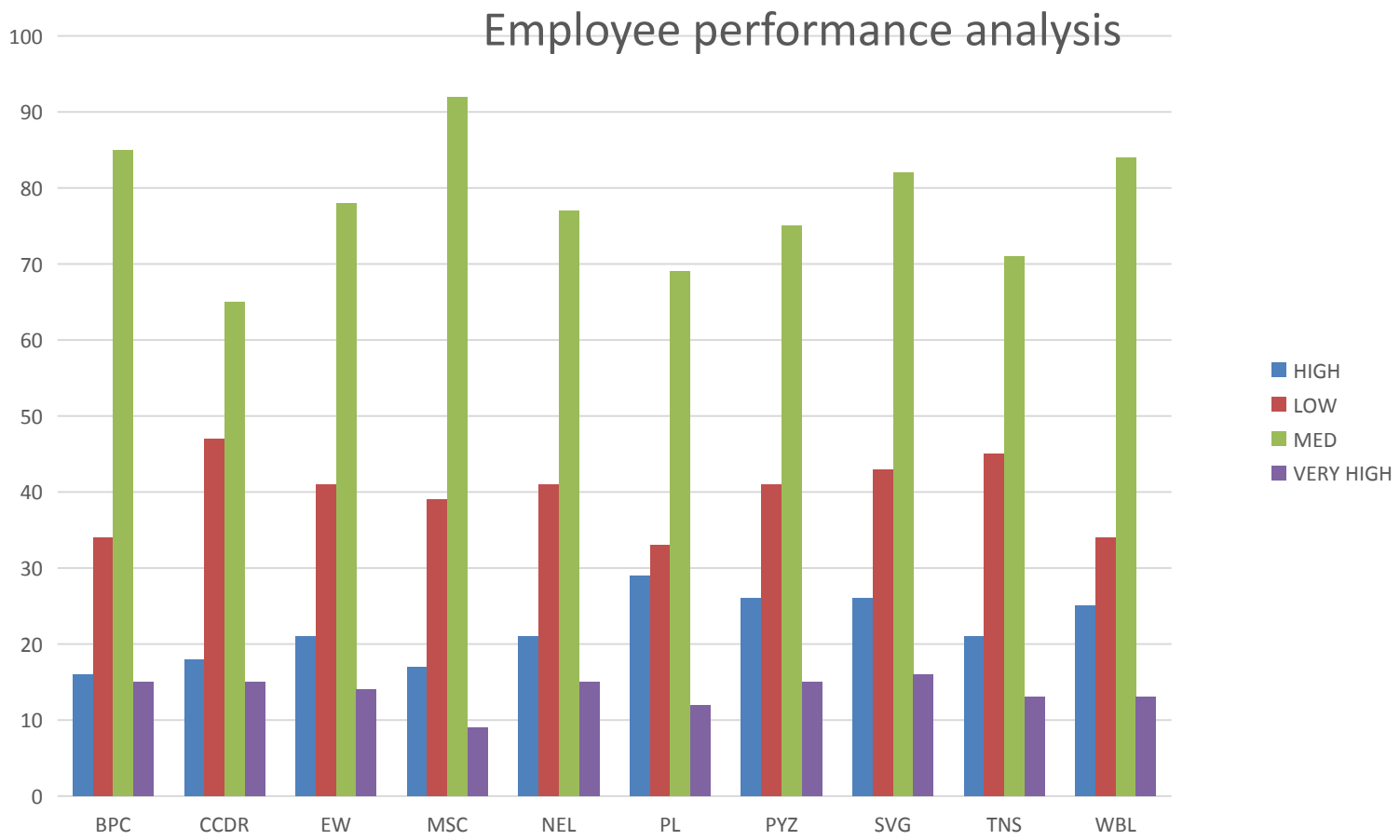
- **Pivot Table Utilization**: For summarizing and analyzing the data, a pivot table was employed. This tool allowed us to efficiently organize and aggregate performance data, particularly after removing any blank values that could skew results. The pivot table facilitated a clear and structured overview of the data, enabling easier analysis of performance trends and patterns.
- **Data Visualization**: To further enhance the understanding of the summarized data, charts were created based on the information derived from the pivot table. These visualizations provided a graphical representation of key insights, making it easier to interpret complex data and identify trends.

- **Final Output**: The culmination of this analysis was a set of valuable insights into employee performance.

The final output revealed performance trends across various parameters, such as gender, business unit, and performance level.

This detailed analysis provided actionable information that could be used for decision-making, performance improvement, and strategic planning within the organization.

RESULTS


Employee performance analysis
100
90
80
70
60
50
40
30
20
10
0
BPC
CCDR
EW
MSC
NEL
PL
PYZ
SVG
TNS
WBL
HIGH
LOW
MED
VERY HIGH

Conclusion

- The final output from this analysis provided a detailed view of employee performance across various parameters such as gender, business unit, and performance level. These insights are invaluable for identifying strengths and areas for improvement, guiding performance reviews, and informing strategic decisions. Overall, the findings underscore the importance of data-driven approaches in managing and enhancing employee performance. By leveraging these insights, the organization can foster a more effective and responsive work environment, ultimately contributing to increased productivity and employee satisfaction.