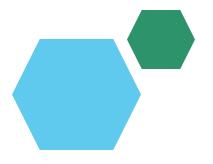
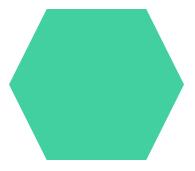
Employee Data Analysis using Excel





STUDENT NAME:S.Subhasini

REGISTER NO:312215885

DEPARTMENT:Bcom A/F

COLLEGE:shri shankarlal sundarbai shasun jain college

For Womens



PROJECT TITLE



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

As an HR Analyst, you have been tasked with evaluating the performance of employees in a large organization. You have access to a dataset containing employee information, including:

- Employee ID
- Name
- Department
- Job Title
- Performance ratings (1-5) for the past 3 years
- Salary
- Years of service



PROJECT OVERVIEW



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- 1. Identify top-performing employees across departments
- 2. Determine the relationship between performance ratings and salary
- 3. Examine the impact of years of service on performance ratings
- 4. Develop a dashboard to visualize key performance metrics
- 5. Provide recommendations for talent development and retention strategies



WHO ARE THE END USERS?



- 1. **HR Managers**: Responsible for talent development, performance management, and employee engagement.
- 2. **Department Heads:** Leaders of various departments who need to understand their team's performance and identify areas for improvement.
- 3. **Senior Management**: Executives who require insights to inform strategic decisions on talent development, resource allocation, and performance improvement initiatives.
- 4. **Team Leads:** Supervisors who need to understand their team members' strengths and weaknesses to provide targeted coaching and development opportunities.
- 5. **Employees**: Individuals who want to understand their own performance, set goals, and track progress.

OUR SOLUTION AND ITS VALUE PROPOSITION



Solution:

- Comprehensive Excel-based employee performance analysis and visualization tool
- Automated data cleaning, processing, and analysis
- Interactive dashboard with customizable charts, tables, and filters.

Value Propositions:

- Data-driven insights: Make informed decisions about talent development, performance management, and resource allocation
- Improved performance management: Identify areas for improvement, set targeted goals, and track progress

Dataset Description

Description: This dataset contains employee performance data for a large organization, including:

- 1. **Employee ID** (Unique identifier for each employee)
- 2. Name (Employee name)
- 3. **Department** (Department or team the employee belongs to)
- 4. **Job Title** (Employee's job title)
- 5. **Performance Rating** (Annual performance rating, 1-5)
- 6. **Salary** (Annual salary)
- 7. **Years of Service** (Number of years with the organization)
- 8. **Age** (Employee age)
- 9. **Gender** (Employee gender)
- 10. **Education Level** (Highest level of education completed)
- 11. **Training Hours** (Number of training hours completed in the past year)
- 12. **Absenteeism** (Number of absences in the past year)
- 13. Sales Performance (Sales revenue generated, for sales roles only)
- 14. Customer Satisfaction (Average customer satisfaction rating, for customer-facing roles only)

THE "WOW" IN OUR SOLUTION

The "Wow" Factor:



Predictive Analytics and Personalized Development Plans

Our solution goes beyond traditional employee performance analysis by incorporating predictive analytics and machine learning algorithms to:

- **1. Forecast future performance:** Identify high-potential employees and predict future performance based on historical data and trends.
- **2. Detect early warning signs:** Flag employees at risk of underperforming or leaving the organization, enabling proactive interventions.
- **3. Personalized development plans:** Generate tailored development recommendations for each employee, aligning with their strengths, weaknesses, and career goals.
- **4. Automated coaching insights:** Provide managers with data-driven coaching suggestions to improve employee performance and address skill gaps.



MODELLING

Modelling Approach:

1. Descriptive Analytics:

- Data cleaning and pre-processing
- Data visualization (charts, tables, etc.)
- Summary statistics (means, medians, etc.)

2. Inferential Analytics:

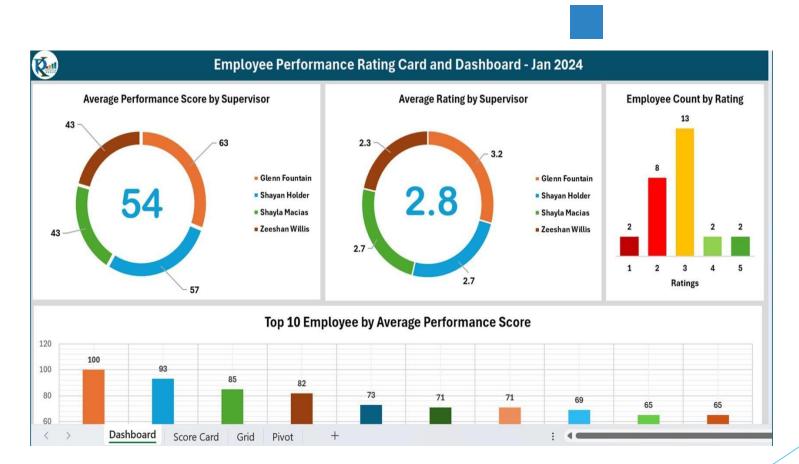
- Correlation analysis (relationships between variables)
- Regression analysis (predicting performance ratings)
- Hypothesis testing (identifying significant differences)
- **3**. **Predictive Analytics** Machine learning algorithms (e.g., decision trees, clustering)
 - Predictive modeling (forecasting future performance)

4. Prescriptive Analytics:

- Optimization techniques (identifying best courses of action)
- Simulation modeling (evaluating different scenarios)

RESULTS

FORMULA=IFS(Z8>=5,"VERY HIGH",Z8>=4,"HIGH",Z8>=3,"MED",TRUE,"LOW")



conclusion

Conclusion:

The employee performance analysis using Excel has provided valuable insights into the organization's talent landscape. By leveraging data analytics and visualization, we have:

- 1. Identified top performers and underperforming employees
- 2. Uncovered departmental and demographic trends influencing performance
- 3. Developed targeted recommendations for talent development and improvement