| **Project Title** | **Hiring Process Analytics for a Multinational Company** |
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| **Skills take away From This Project** | **Data Cleaning and Preprocessing**  **Outlier Detection and Handling**  **Data Visualization**  **Statistical Analysis**  **Business Insights Generation**  **Proficiency in Excel for Data Analysis** |
| **Domain** | **Human Resources, Data Analytics** |

[**how to submit project,ple,doubt-form.mp4**](https://drive.google.com/file/d/1PS3qwOJqykNC0c9Kv7Vl0MwQoULYVF-_/view?usp=drive_link)

**DATASET :** [**Hiring-process-analsis-dataset**](https://docs.google.com/spreadsheets/d/1wDRSjdJUPtoD2HyxLcyVVM42cbni9kAVRutvrcrmg0M/edit?usp=sharing)

**Problem Statement:**

Analyze the hiring process data of a multinational company to identify patterns, trends, and insights that can help optimize the hiring process, improve decision-making, and enhance overall recruitment efficiency.

**Business Use Cases:**

**optimizing Recruitment Strategies:** Understanding the gender distribution and departmental hiring trends can help tailor recruitment strategies to promote diversity and meet departmental needs more effectively.

**Salary Benchmarking:** Analyzing salary distribution and averages can assist in aligning offers with industry standards and ensuring competitive compensation packages.

**Departmental Resource Allocation:** Insights from departmental analysis can guide resource allocation and hiring efforts across various departments.

**Position Tier Evaluation:** Evaluating the distribution of hires across different position tiers can help in workforce planning and talent management.

**Approach:**

**Handling Missing Data:** Identify any missing values in the dataset and decide whether to remove, impute, or leave them based on their impact on the analysis.

**Outlier Detection and Removal:** Use statistical methods to detect outliers in the dataset and decide the best course of action—removal, replacement, or retention.

**Data Summary:** Calculate key statistical measures such as averages, medians, and distributions for various variables.

**Visualization:** Create charts, graphs, and other visual aids to represent gender distribution, salary distribution, departmental analysis, and position tier analysis.

**Insight Generation:** Draw meaningful conclusions from the analysis that can provide actionable insights for improving the company's hiring process.

**Data Analytics Tasks:**

After downloading the dataset, use Excel to answer the below questions:

**A. Hiring Analysis:** The hiring process involves bringing new individuals into the organization for various roles.

**Your Task:** Determine the gender distribution of hires. How many males and females have been hired by the company?

**B. Salary Analysis:** The average salary is calculated by adding up the salaries of a group of employees and then dividing the total by the number of employees.

**Your Task:** What is the average salary offered by this company? Use Excel functions to calculate this.

**C. Salary Distribution:** Class intervals represent ranges of values, in this case, salary ranges. The class interval is the difference between the upper and lower limits of a class.

**Your Task:** Create class intervals for the salaries in the company. This will help you understand the salary distribution.

**D. Departmental Analysis:** Visualizing data through charts and plots is a crucial part of data analysis.

**Your Task:** Use a pie chart, bar graph, or any other suitable visualization to show the proportion of people working in different departments.

**E. Position Tier Analysis:** Different positions within a company often have different tiers or levels.

**Your Task:** Use a chart or graph to represent the different position tiers within the company. This will help you understand the distribution of positions across different tiers.

**F. Interview Time Analysis:**Understanding whether specific times or dates correlate with hiring success or rejection rates can provide insights into optimizing the interview schedule.

* **Your Task:** Analyze the data to identify any trends related to the date or time of the interviews. Are there specific periods when hiring rates are higher or lower? Use Excel functions to identify patterns and visualize the results using charts.

**G. Interview Metrics Analysis:**Evaluating interview-related metrics can provide deeper insights into the hiring process's efficiency.

* **Your Task:** Calculate metrics such as the average number of interviews conducted per position or department, the average time-to-hire, and other related measures. Use these metrics to evaluate the efficiency and effectiveness of the hiring process in different departments.

**H. Departmental Hiring Trends Comparison:**Comparing hiring trends across different departments can reveal which areas have the most hiring activity and help identify potential bottlenecks or areas of success.

* **Your Task:** Compare department-wise hiring trends by analyzing the number of hires, rejections, and time-to-hire across different departments. Identify which departments hire the most and explore potential reasons behind these trends. Visualize your findings using appropriate charts or graphs.

**Results:**

Gender distribution of hires within the company.

Average salary offered and its distribution across different class intervals.

Visualization of the proportion of employees across various departments.

Distribution analysis of position tiers within the company.

Recommendations for improving the hiring process based on the analysis.

**Project Evaluation metrics:**

**Accuracy:** Precision in handling missing data and outliers.

**Completeness:** Coverage of all aspects of the hiring process as defined in the tasks.

**Insightfulness:** The relevance and applicability of the insights drawn from the data.

**Presentation:** Clarity and effectiveness of data visualization.

**Documentation:** Quality of the report, including clarity, completeness, and professionalism.

**Technical Tags:**

Data Cleaning

Outlier Detection

Statistical Analysis

Data Visualization

Excel Analysis

Recruitment Analytics

**Data Set:**

**Source:** The dataset is provided for the project.

**Format:** The dataset is in a tabular format with columns including application\_id, Interview Taken on, Status, event\_name, Department, Post Name, and Offered Salary.

**Variables:** The dataset includes variables related to the interview process, applicant status, gender, department, position name, and offered salary.

**Data Set Explanation:**

**application\_id**: Unique identifier for each applicant.

**Interview Taken on**: Date and time of the applicant's interview.

**Status**: Outcome of the application process (e.g., Hired, Rejected).

**event\_name**: Gender of the applicant.

**Department**: Department the applicant was interviewed for.

**Post Name**: Job title or position for which the candidate applied.

**Offered Salary**: Salary offered to the candidate upon hiring.

**Project Deliverables:**

A comprehensive Excel workbook containing all the analysis, calculations, and visualizations.

A report (PDF/PPT) summarizing the findings, insights, and recommendations.

Documentation detailing the approach, methodologies used, and any assumptions made during the analysis.

**Project Guidelines:**

**Coding Standards:** Ensure that all Excel formulas and functions are well-organized and commented where necessary.

**Version Control:** If applicable, use version control to track changes and maintain backups of your analysis.

**Best Practices:** Follow data analysis best practices, including thorough data validation, careful interpretation of results, and ensuring that visualizations are clear and informative.

**Report Writing:** The final report should be professional, concise, and structured to communicate findings effectively to stakeholders.

**PROJECT DOUBT CLARIFICATION SESSION ( PROJECT AND CLASS DOUBTS)**

**About Session:** The Project Doubt Clarification Session is a helpful resource for resolving questions and concerns about projects and class topics. It provides support in understanding project requirements, addressing code issues, and clarifying class concepts. The session aims to enhance comprehension and provide guidance to overcome challenges effectively.

**Note: Book the slot at least before 12:00 Pm on the same day**

**Timing: Tuesday, Thursday, Saturday (5:00PM to 7:00PM)**

**Booking link :**[**https://forms.gle/XC553oSbMJ2Gcfug9**](https://forms.gle/XC553oSbMJ2Gcfug9)

**LIVE EVALUATION SESSION (CAPSTONE AND FINAL PROJECT)**

**About Session:** The Live Evaluation Session for Capstone and Final Projects allows participants to showcase their projects and receive real-time feedback for improvement. It assesses project quality and provides an opportunity for discussion and evaluation.

**Note: This form will Open on Saturday and Sunday Only on Every Week**

**Timing: Monday-Saturday (11:30PM to 12:30PM)**

**Booking link :** [**https://forms.gle/1m2Gsro41fLtZurRA**](https://forms.gle/1m2Gsro41fLtZurRA)