ANALYZING 2023 EMPLOYEE SALARIES IN MONTGOMERY COUNTY.

BY ESSIEN E.
AUG 2024

OUTLINE

- Data Collection and Preparation.
- Methodology:
  - Tools Utilized for Data Analysis in Project.
  - Data collection & Preparation.
  - Exploratory Data Analysis.
- Departmental & Comparative Analysis Dashboards.
- Reporting and Insights.
- Conclusion.

TOOLS UTILIZED FOR DATA ANALYSIS IN PROJECT

- ✓Google BigQueryCloud Sandbox for EDA

- ✓MS Excel for EDA.
- ✓IBM Cognos analytics for visualizations.

METHODOLOGY, DATA COLLECTION AND PREPARATION

- Data source: Data.gov “https://catalog.data.gov/dataset/employee-salaries-2023“
- Cleaned and preprocessed the data for accuracy and consistency with SQL on Google Big Query sandbox platform.
- Performed descriptive statistics and visualized data on IBM Cognos analytics.
- Conducted Departmental Analysis of salaries by department, grade and identified patterns.
- Carried out Analysis and Reporting by comparing data and generating insights.

DEPARTMENTAL & COMPARATIVE ANALYSIS DASHBOARD1

EmployeeSalariesByDeptDashboard

BasePay

$929M

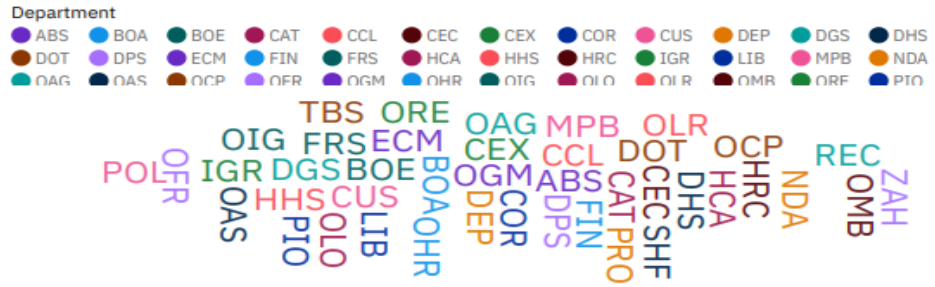
BasePay

AvrgBasePay

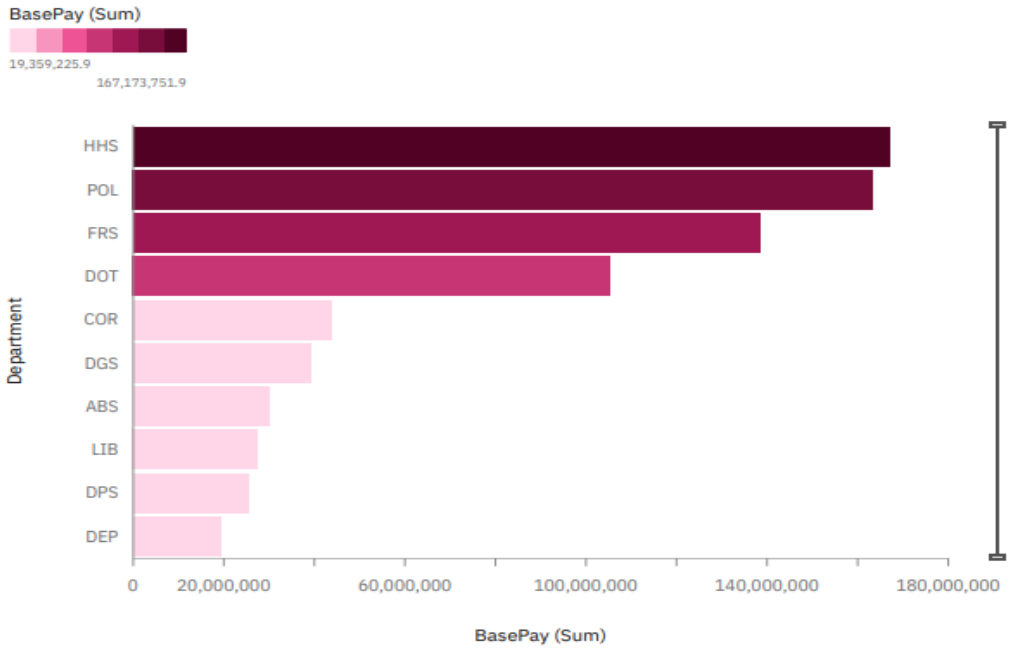
$90.3K

BasePay

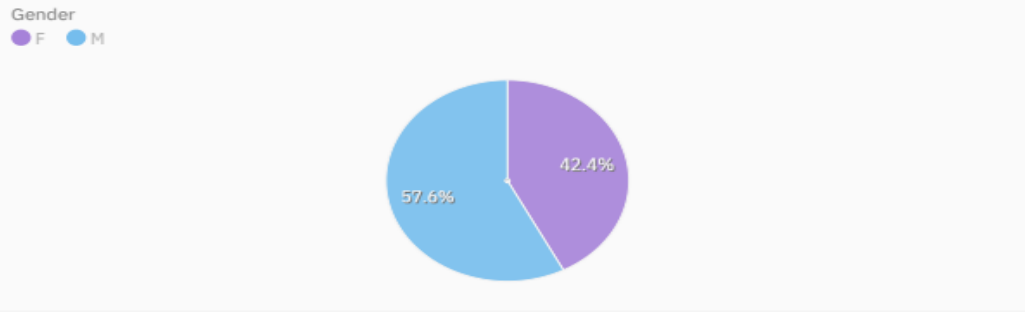
WordChatDepartment



BasePay by Department



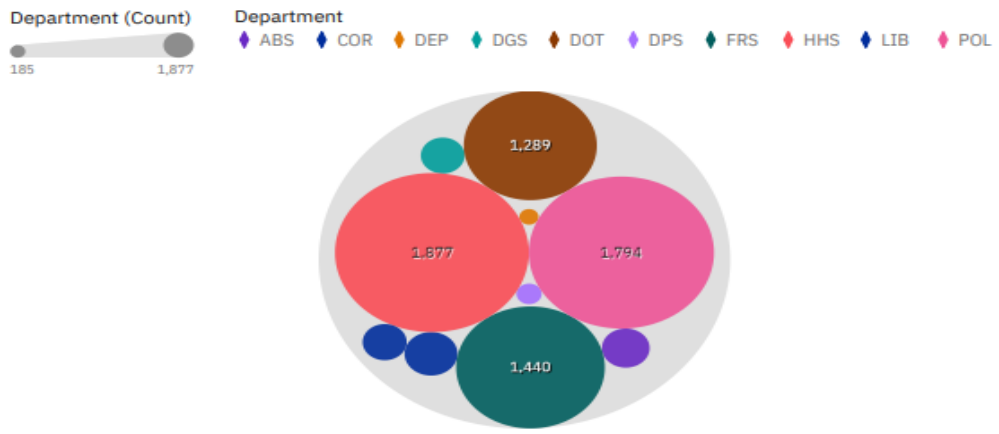
GenderPieChart



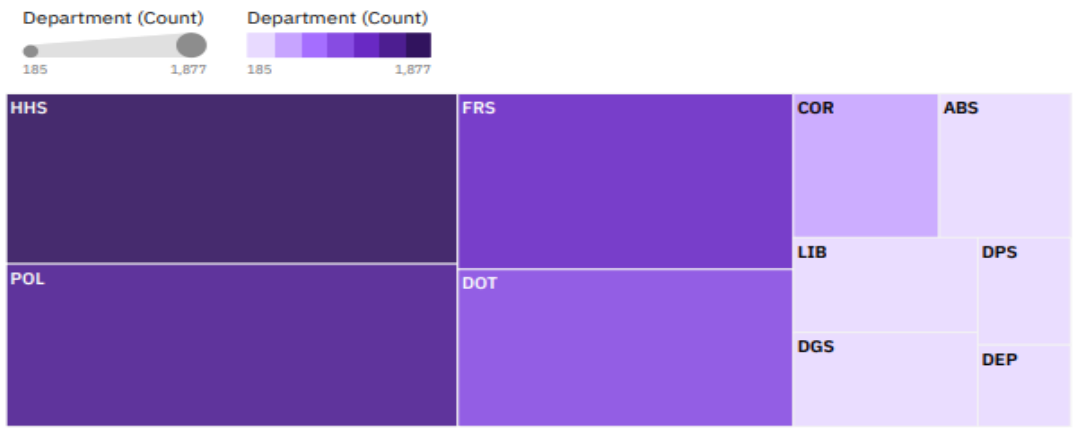
DEPARTMENTAL & COMPARATIVE ANALYSIS DASHBOARD2

EmployeeSalariesDashboard2

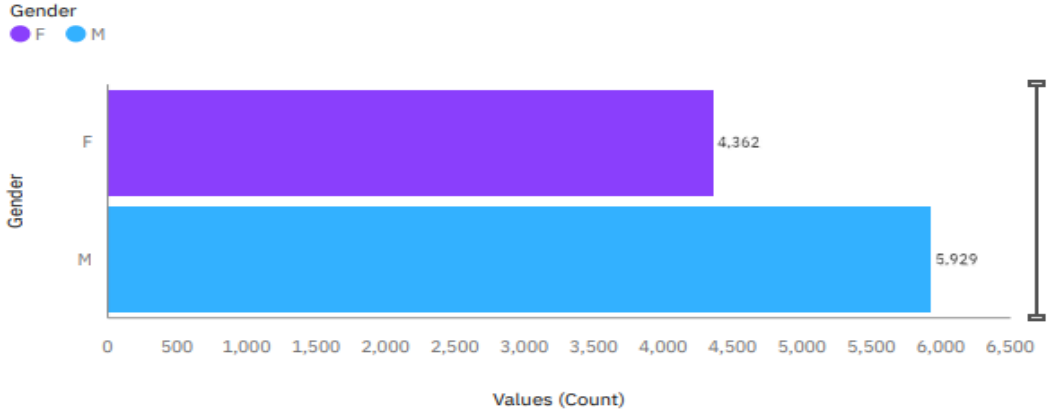
Top10DepartmentsBySalaryBubbleChart



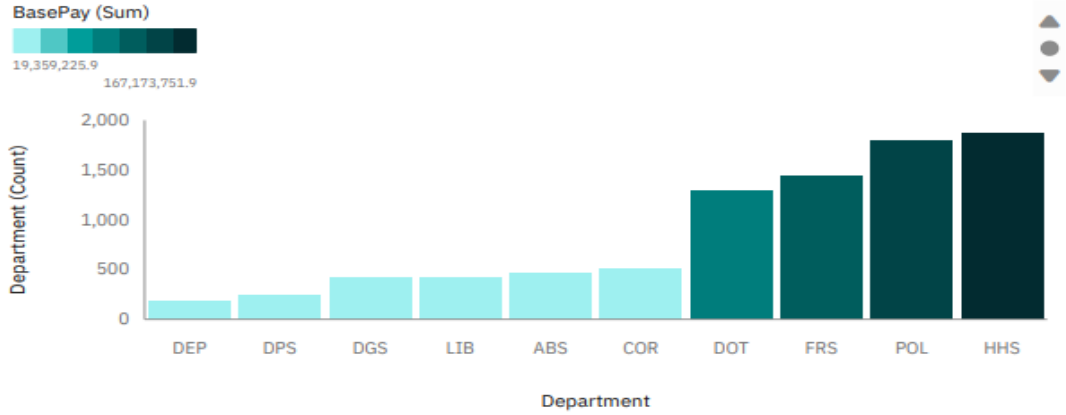
Top10DepartmentsHeatMap



EmployeeSalariesByGender



10TopDepartments



REPORTING'S , INSIGHTS
CONCLUSION

Reports & Insights

- HHS and POL had the highest average salaries in 2023.
- DEP had the lowest average salary among the top 10 departments.

Conclusion

- Variation across departments reflects differing priorities and responsibilities.

Thanks