HR Analytics Project - Executive Summary

This project presents an end-to-end HR Analytics dashboard created in Power BI. The analysis focuses on employee attrition, workforce demographics, compensation, and key HR performance metrics. Using Power BI's interactive features such as bookmarks, filters, and slicers, the dashboard enables dynamic exploration of HR data.

Key Insights

- Employee Overview : The dataset includes 50K employees with an attrition count of 25K. The average hourly rate is $115, with an average daily rate of ~$799. Employees have worked an average of 20.5 years.
- Attrition Analysis : The overall attrition rate is ~50%. Attrition varies slightly by department, with Research & Development, Sales, and Software hovering around 50–51%. Employees with fewer years since last promotion show higher attrition and overtime counts.
- Overtime Trends : Employees with 1–10 years since their last promotion account for the highest overtime, with overtime percentage exceeding the target (50.9% vs goal of 20%).
- Work-Life Balance : Work-life balance averages at 2.5 on a 5-point scale. Married employees show a slightly better balance compared to divorced employees.
- Gender and Pay : Salary hikes are distributed nearly equally between male (49.86%) and female (50.14%) employees.
- Departmental Insights : Average total working years are consistent across departments (around 20 years), with Support and Sales slightly higher than other departments.

Dashboard Features

- Interactive Filters : Users can filter data by department, gender, marital status, and years since promotion.
- KPI Cards : Key performance indicators such as attrition rate, employee count, and overtime vs. target are highlighted.
- Bookmarks & Navigation : Bookmarks and selections allow smooth navigation between overview and detailed employee-level insights.
- Detailed View : The Details page provides granular employee data, including demographics, job role, travel frequency, income, years worked, and training history.

Conclusion

The HR Analytics Power BI dashboard provides a comprehensive view of workforce dynamics, attrition drivers, and HR performance metrics. By leveraging interactive visualizations, HR teams can identify risk areas, monitor key KPIs, and make data-driven decisions to improve employee retention and engagement.