

## Project Documentation: HR Talent Insights & Performance Dashboard

### 1. Executive Summary

This project presents a comprehensive HR Analytics solution developed using Power BI. The dashboard transforms raw workforce data into actionable insights, focusing on attrition trends, employee performance, and financial metrics. It serves as a decision-making tool for HR managers and executive leadership to optimize human capital.

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### 2. Data Overview & Analysis

The analysis is built upon a dataset of **1,470 employees**. Key initial findings include:

- **Attrition Rate:** A baseline attrition of **16.12%**.
  - **Employee Sentiment:** Average Manager Rating of **3.5** and a Work-Life Balance score of **3.41**.
  - **Demographics:** Diversity analysis showing **45.9% Female** and **44.3% Male** distribution.
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### 3. Dashboard Architecture

The report is structured into two specialized pages:

#### Page 1: Workforce Overview

- **Attrition Rate by Department:** Visualized using bar charts to highlight high-risk areas like Sales (approx. 20%).
- **Total Employees Over Time:** A line chart identifying seasonal trends in headcount.
- **Education Level Breakdown:** Mapping qualifications from High School to Doctorate levels.

#### Page 2: Performance & Finance

- **Estimated Attrition Cost:** A critical financial KPI showing a potential impact of **\$29M**.
- **Salary Efficiency:** Tracking Average Salary (**\$118.9K**) against an efficiency index of **0.03**.

- **Workforce Wellbeing Flow:** A customized flow chart tracking wellbeing gaps (average **0.06**) across departments.
  - **Comprehensive Matrix:** A filtered analysis of the **Top 5 Job Roles**. For example, **Data Scientists** show a high rating of **3.53** with an average salary of **\$57,632**.
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#### 4. Design & Visual Identity

The dashboard utilizes a professional **Petroleum Blue & Teal** palette:

- **Teal/Green:** Highlights positive performance (e.g., ratings above 3.5).
  - **Coral/Red:** Used for critical attrition alerts to drive immediate attention.
  - **Layout:** A clean, grid-based design with white-space optimization for better readability.
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#### 5. Technical Implementation (DAX)

Key measures were created to provide deeper insights:

- **Attrition Cost Calculation:** Estimating the financial loss per department.
  - **Top N Filters:** Implemented to focus management on the most impactful job roles.
  - **Wellbeing Gap:** A custom metric calculating the variance between current and ideal satisfaction levels.
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#### 6. Deployment: GitHub Integration

The project is hosted on GitHub to ensure version control and transparency:

- **Repository:** HR-Analytics-PowerBI-Dashboard.
- **Contents:** Includes the .pbix source file, automated PDF reports, and high-resolution screenshots for documentation.
- **README:** A technical guide explaining the data model and visual choices for the developer community.