Career Development Analysis Dashboard

Introduction

This report presents an in-depth analysis of employee performance, development, and turnover at Acme Corporation. Utilizing a comprehensive dataset, we aim to identify key factors influencing employee turnover, analyze training and development impacts, and assess performance metrics across various departments and roles. The insights derived from this analysis will inform strategies to enhance employee retention, optimize training programs, and improve overall organizational performance.

Data Overview

The dataset includes the following variables:

- Employee ID
- Age
- Attrition (binary: 1 = left the company, 0 = still employed)
- Business Travel
- Department
- Distance From Home
- Education
- Education Field
- Environment Satisfaction
- Gender
- Job Involvement
- Job Level
- Job Role
- Job Satisfaction
- Marital Status
- Monthly Income
- Num Companies Worked
- Over Time (binary)
- Performance Rating

- Relationship Satisfaction
- Stock Option Level
- Total Working Years
- Training Times Last Year
- Work-Life Balance
- Years At Company
- Years In Current Role
- Years Since Last Promotion
- Years With Current Manager

Data Loading and Preparation

a. Import Dataset

• Open Power BI Desktop.

• Go to Home > Get Data > Excel (or appropriate data source) and import

your dataset.

Dashboard Analysis

Page 1: Employee Turnover Analysis

Visuals and Insights:

1. **Attrition Rate by Department**
   - Research & Development: Highest attrition rate.
   - Sales: Moderate attrition rate.
   - Human Resources: Lowest attrition rate.
   - **Insight**: Research & Development has the highest attrition rate, indicating potential issues with job satisfaction or work environment.
2. **Attrition Rate by Job Role**
   - Sales Executive: Highest attrition rate.
   - Laboratory Technician: Moderate attrition rate.
   - Research Director: Lowest attrition rate.
   - **Insight**: Sales Executives are most likely to leave, suggesting a need to address factors contributing to their high turnover.
3. **Average Monthly Income by Attrition**
   - Employees who left have a slightly lower average income than those who stayed.
   - **Insight**: Compensation may be a factor in turnover but is not the sole reason.
4. **Years at Company by Attrition**

- ○ Employees with shorter tenures are more likely to leave.
- ○ **Insight**: Newer employees are at higher risk of attrition, emphasizing the importance of onboarding and early engagement programs.
5. **Job Satisfaction and Attrition**
- ○ Lower job satisfaction correlates with higher attrition.
- ○ **Insight**: Improving job satisfaction could reduce turnover rates.

Recommendations:

- Implement targeted retention strategies in Research & Development and Sales departments.
- Review compensation structures, especially for roles with high attrition rates.
- Enhance onboarding and early engagement programs to retain new employees.
- Conduct regular job satisfaction surveys and address identified issues promptly.

Page 2: Training and Development

Visuals and Insights:

1. **Average Training Sessions by Department**
- ○ Research & Development: Highest average training sessions.
- ○ Human Resources: Moderate average training sessions.
- ○ Sales: Lowest average training sessions.
- ○ **Insight**: Research & Development invests more in training, which could be linked to lower job satisfaction and higher turnover despite high training investment.
2. **Average Training Sessions by Job Role**
- ○ Research Scientist: Highest average training sessions.
- ○ Sales Executive: Lowest average training sessions.
- ○ **Insight**: Disparities in training opportunities across roles may impact job performance and satisfaction.
3. **Training Sessions and Performance Correlation**
- ○ Positive correlation between the number of training sessions and performance ratings.
- ○ **Insight**: Increased training is associated with higher performance, emphasizing the importance of continuous development programs.

Recommendations:

- Standardize training opportunities across all departments and job roles to ensure equitable development.
- Monitor the effectiveness of training programs and adjust them based on performance outcomes.
- Encourage continuous learning and development to maintain high performance levels.

Page 3: Employee Performance and Development Analysis

Visuals and Insights:

1. **Promotion Rate**
   - Overall promotion rate is 1.93.
   - **Insight**: Understanding promotion dynamics can help identify areas for career progression improvement.
2. **Employee Distribution by Education Level**
   - Majority of employees have a Bachelor's degree.
   - **Insight**: Education level distribution informs training and development needs.
3. **Average Years Since Last Promotion by Department**
   - Research & Development: 2.1 years.
   - Sales: 2.4 years.
   - Human Resources: 1.8 years.
   - **Insight**: Differences in promotion frequency suggest varying career progression opportunities across departments.
4. **Employee Job Involvement Analysis**
   - Higher job involvement correlates with higher performance ratings.
   - **Insight**: Fostering job involvement can enhance employee performance.

Recommendations:

- Develop clear career progression paths to improve promotion rates.
- Tailor development programs to meet the needs of employees at different education levels.
- Promote job involvement initiatives to boost performance.

Page 4: Performance Overview

Visuals and Insights:

1. **Average Performance Rating by Department**
   - Research & Development: Highest average performance rating.

- Human Resources and Sales: Slightly lower performance ratings.
- **Insight**: Research & Development employees show higher performance, indicating effective department-specific strategies.

2. **Average Performance Rating by Job Role**
   - Consistent high performance across most roles, with some variations.
   - **Insight**: Roles with lower performance ratings may need targeted interventions.
3. **Average Performance Rating by Education Levels**
   - Higher education levels correlate with slightly higher performance ratings.
   - **Insight**: Employees with advanced degrees tend to perform better.
4. **Average Performance Rating and Years in Current Role**
   - Performance ratings vary with tenure in the current role.
   - **Insight**: Understanding tenure dynamics can inform role-specific development strategies.

Recommendations:

- Identify and replicate successful strategies from high-performing departments.
- Implement role-specific interventions to boost performance where needed.
- Support continuous education and development for employees to maintain high performance.

Page 5: Promotion & Education

Visuals and Insights:

1. **Promotion Rate by Department**
   - Human Resources: 1.99
   - Research & Development: 1.94
   - Sales: 1.91
   - **Insight**: Human Resources department has the highest promotion rate.
2. **Promotion Rate by Job Role**
   - Human Resources: 2.5
   - Manufacturing Director: 2.3
   - Laboratory Technician: 2.3
   - **Insight**: High promotion rates in HR and Manufacturing Director roles indicate effective career progression in these roles.
3. **Average Years Since Last Promotion by Job Role**
   - Managers: 4.8 years.
   - Research Director: 3.2 years.

- ○ **Insight**: Managers have the longest tenure before promotion, indicating slower career progression compared to other roles.

Recommendations:

- Encourage frequent promotions and career development in roles with lower promotion rates.
- Review and adjust career progression policies to ensure equitable opportunities across all job roles.
- Implement mentorship and coaching programs to support career advancement.