



Employee Attrition Analysis

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Problem Statement

ABC Corporation, a multinational company, faces challenges with employee attrition. The company aims to understand the factors driving attrition to develop effective retention and talent management strategies. To address this issue, ABC Corporation has initiated a Power BI project to comprehensively analyze its attrition data.

Project Objectives

- Identify Key Drivers of Attrition
- Segmentation Analysis
- Dashboard and Reporting: Develop a Power BI dashboard to present insights effectively.

Data Sources

1. **Database:** Includes Employee_survey, Manager_survey, and EmployeeInfo tables.
2. **IN/OUT Times:** Sheets from the Clock-In-Machine for the year 2015.

Project Steps

1. **Data Collection:** Gathered from databases and CSV files, imported into Power BI.
2. **Data Preparation:** Handled missing values, adjusted data types, and performed necessary transformations.
3. **Data Modeling:** Utilized a dimensional model
 - The main business process is the **attrition** .
 - Dimensions: Employees Dim and Surveys Dim
 - The Fact Table grain is the **employee** and the measures for employees such as avg overtime hours, average working hours, total absent days, total early departure days ,total late days, years at company..etc.
4. **Visualization:** Designed an interactive Power BI dashboard to present insights.

Key Findings, Insights and recommendations

1. Regarding Employees Analysis:

- Younger employees (Age 18-25) exhibit a high attrition rate of 36.71%.
Recommendations: Implement mentorship programs and career development initiatives to foster growth and investment in the company's future.
- Employees with college education have an attrition rate of 18.79%
Recommendations: Offer opportunities for further education or specialized training to enhance skills and demonstrate commitment to professional development.
- Employees from the Human Resources field have a 40.74% attrition rate.



Recommendations: Conduct exit interviews to identify reasons for attrition and address organizational or cultural factors contributing to dissatisfaction.

- Employees with longer distances face a 20.27% attrition rate.

Recommendations: Explore options for remote work or flexible scheduling to promote work-life balance.

- Employees with a monthly income less than 30,000 experience a 17.47% attrition rate.

Recommendations: Review salaries to ensure competitiveness within the industry.

2. Regarding Departments Analysis:

- The Human Resources department has the highest attrition rate (30.16%)

Recommendations: Conduct assessments to identify underlying issues and tailor retention strategies accordingly.

- All departments have the highest attrition rate for employees with years (0-2) with current manager

Recommendations: Enhance managerial training to equip supervisors with the skills necessary to effectively onboard and engage new team members

3. Regarding Surveys analysis:

- Employees with low environment satisfaction have a 25.21% attrition rate.

Recommendations: Provide opportunities for employees to give feedback and participate in decision-making processes, empowering them to contribute to a positive work environment.

- Employees with low job involvement have the highest attrition rate (21.14%)

Recommendations: Offer meaningful and challenging work assignments that align with employees' skills, interests, and career aspirations.

- Employees with low job satisfaction have the highest attrition rate(22.96%)

Recommendations: Conduct regular performance evaluations and goal-setting sessions to ensure that employees' roles and responsibilities align with their career goals and aspirations.

4. Regarding Attendance Insights:

- Employees working overtime have a 40% attrition rate.

Recommendations: Review workload distribution and resource allocation to prevent burnout and promote employee well-being.

- Employees with working hours above 10 have the highest attrition rate (31.05%)

Recommendations: Review workload distribution to prevent pressure, prioritize work-life balance, and encourage open communication between managers and employees to monitor workload.

- Employees with absent days less than 20 days have the highest attrition rate (18.27%)

Recommendations: Promote employee health and well-being through wellness programs, access to healthcare resources, and fostering a culture of open communication to address absenteeism concerns proactively.