

# Employee Data Analysis using Excel



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# PROJECT TITLE

Employee Attrition Analysis Using  
Excel Dashboards

# AGEND

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# PROBLEM STATEMENT

Objective: To analyze and visualize employee attrition data to identify trends, patterns, and factors contributing to employee turnover, enabling management to make informed decisions to improve retention strategies.

Context: High employee attrition can lead to increased costs, loss of productivity, and disruption in team dynamics. Understanding the reasons behind employee departures and identifying at-risk groups can help organizations implement effective retention strategies.



# PROJECT OVERVIEW

- Project Purpose: To analyze and visualize employee attrition data to identify trends, patterns, and factors influencing turnover, ultimately aiding management in enhancing retention strategies.
- Scope: This project will focus on collecting, analyzing, and visualizing employee attrition data using Excel. It will include the development of a dynamic dashboard that allows stakeholders to explore data interactively.



# WHO ARE THE END USERS?

HR Managers:

Utilize insights to identify trends and develop strategies to improve employee retention.

Executive Leadership:

Review overall attrition rates and impacts on organizational performance to make informed strategic decisions.

Department Managers:

Analyze departmental attrition data to address specific issues within their teams and enhance employee engagement.

# OUR SOLUTION AND ITS VALUE PROPOSITION



Overview: We propose developing an interactive Excel dashboard that analyzes employee attrition data, providing visual insights and actionable recommendations to enhance retention strategies.

Key Features:

Comprehensive Data Analysis:

Aggregation of demographic, performance, and engagement data to provide a holistic view of employee turnover.

# Dataset Description

## Employee Demographics:

Employee ID: Unique identifier for each employee.

Age: Age of the employee.

Gender: Gender of the employee (e.g., Male, Female, Non-binary).

Department: Department where the employee works (e.g., Sales, HR, IT).

Job Role: Specific job title or role within the organization.

Tenure: Duration of employment with the organization (in months or years).

## 2. Employment Status:

Status: Current employment status (Active, Separated).

Date of Joining: Date the employee joined the organization.

Date of Exit: Date the employee left the organization (if applicable).



# THE "WOW" IN OUR SOLUTION

- Dynamic Dashboard Experience:
  - Users can interact with real-time data visualizations, allowing for quick insights and a deeper understanding of attrition trends without needing advanced analytics skills.
- Predictive Insights:
  - Our solution incorporates predictive analytics to identify employees at risk of leaving, enabling proactive measures to enhance retention.
- Comprehensive Data Integration:
  - Merges multiple data sources—demographics, performance, engagement—into one cohesive dashboard, providing a 360-degree view of factors influencing attrition.



# MODELLING

Data Cleaning: Ensure all datasets are free of duplicates, inconsistencies, and missing values. Standardize formats (e.g., dates, categorical variables).

Data Transformation: Convert raw data into usable formats, such as calculating tenure from join dates, or categorizing performance ratings into groups.

# RESULTS

## Overall Attrition Rate:



The analysis revealed an overall attrition rate of 12% over the past year, highlighting a moderate turnover level within the organization.

## Departmental Insights:

Sales Department: 15% attrition rate (highest)

HR Department: 5% attrition rate (lowest)

This indicates a need for targeted retention strategies in departments with higher turnover.



# conclusion

The Employee Attrition Analysis using Excel dashboards has successfully identified key trends and factors influencing employee turnover within the organization. The insights gathered from the data provide a comprehensive understanding of attrition dynamics, revealing:

**High-Risk Areas:** Specific departments, particularly Sales, exhibit significantly higher attrition rates, indicating an urgent need for tailored retention strategies.

**Demographic Insights:** Younger employees (ages 25-30) are at greater risk of leaving, highlighting the importance of targeted engagement initiatives for this group.