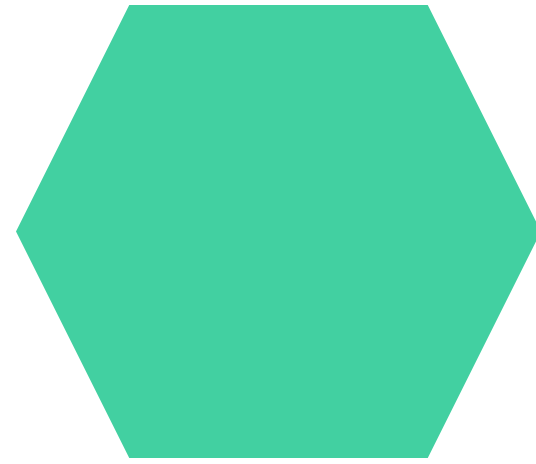
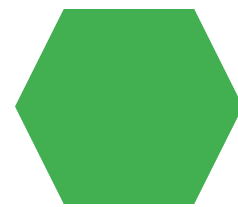


Employee Data Analysis using Excel



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PROJECT TITLE

Employee Tenure Analysis using Excel



AGENDA

1. Problem Statement
2. Project Overview
3. End Users
4. Our Solution and Proposition
5. Dataset Description
6. Modelling Approach
7. Results and Discussion
8. Conclusion



PROBLEM STATEMENT

Employee Tenure Analysis:

- Purpose: To understand employee retention and turnover rates.
- Analysis:
 - Calculate the average tenure of employees by DepartmentType, Division, and BusinessUnit.
 - Highlight departments or units with unusually high or low tenure.
 - Analyze tenure trends based on JobFunctionDescription and EmployeeType (e.g., full-time vs. part-time).
 - To determine if there's a correlation between tenure and performance.
 - To understand reasons for employee turnover and identify areas of improvement.
 - To gauge overall employee satisfaction and identify top performers.
 - To assess how employees progress through the company and identify potential growth areas.



PROJECT OVERVIEW

The Tenure Analysis Project aims to provide a comprehensive understanding of employee retention and turnover trends within the company. By examining employee tenure across various departments, divisions, job functions, and demographic groups, this project seeks to uncover patterns and factors influencing employee longevity. The analysis will explore correlations between tenure, performance, and other variables to identify high-performing, long-tenured employees and areas with high turnover rates. This insight will help the company develop targeted strategies to improve employee retention, optimize resource allocation, and foster a more inclusive workplace, ultimately enhancing overall organizational performance.



WHO ARE THE END USERS?

Benefits of Tenure Analysis:



1. Human Resources (HR) Department:

Identify Turnover Trends: HR can pinpoint departments or roles with high turnover rates, allowing them to focus on retention strategies for those areas.

Optimize Recruitment and Onboarding: By understanding the factors that contribute to longer tenure, HR can enhance recruitment and onboarding processes to attract and retain employees who are more likely to stay.

2. Management and Leadership:

Strategic Decision-Making: Management can use tenure analysis to make informed decisions about promotions, team restructuring, and resource allocation based on the stability and performance of different teams.

Making data-driven decisions regarding team composition and leadership.

Enhancing workforce planning and budget allocation based on tenure patterns.



WHO ARE THE END USERS?

3. Employees:

Career Development: Employees can gain insights into typical career paths and timeframes for promotions or role changes within the company, helping them plan their career.

Promote Fairness: Ensures that all employees, regardless of background, have equal opportunities for career progression and longevity in the company.

4. The Organization as a Whole:

Enhanced Productivity: By retaining experienced employees, the organization benefits from a more skilled and knowledgeable workforce, which can lead to higher productivity and innovation.

Cost Savings: Reducing turnover saves costs associated with hiring, onboarding, and training new employees.

Improved Culture: Understanding and improving tenure can contribute to a more positive and stable organizational culture, attracting top tal

OUR SOLUTION AND ITS VALUE PROPOSITION

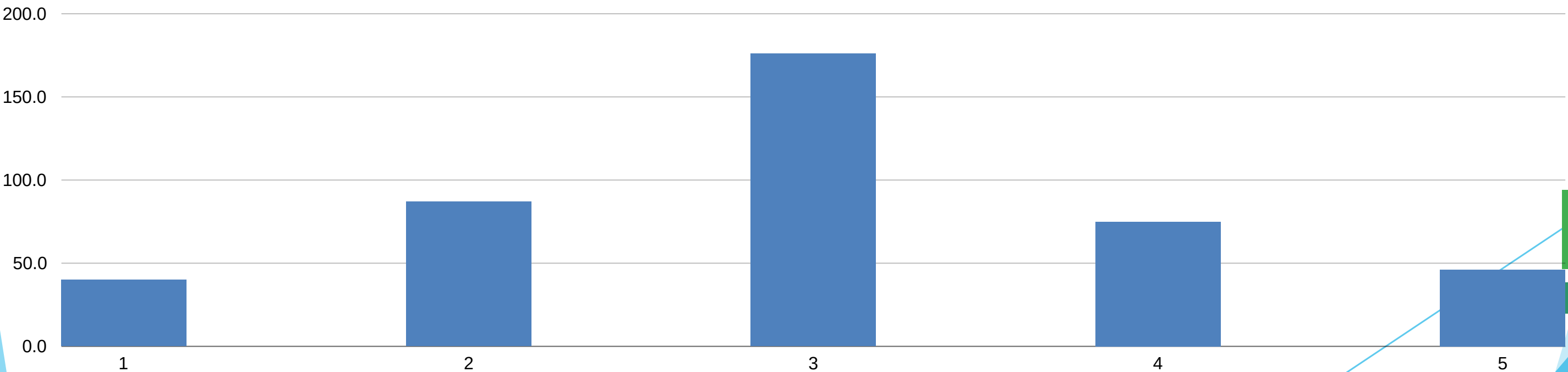
Tenure Calculation Formula:



```
=IF(ISBLANK(ExitDate), DATEDIF(StartDate, TODAY(), "y"), DATEDIF(StartDate, ExitDate, "y"))
```

Purpose: This formula calculates the tenure of each employee in years. It checks if the ExitDate is blank, meaning the employee is still with the company, and calculates tenure up to the current date. If there is an ExitDate, it calculates the tenure up to that date.

Value Proposition: Accurate calculation of tenure allows HR and management to understand how long employees typically stay with the company, helping identify patterns of long-term employment or areas with high turnover.



Dataset Description

For this analysis, we utilized an employee dataset sourced from Kaggle, which includes a comprehensive range of features related to employee demographics, job details, and performance metrics. The dataset provides a rich foundation for analyzing various aspects of employee behavior, including tenure, performance, and turnover.

Features and Columns Used :

The key features and columns from the dataset that were used in this analysis include:

empId which is of numeric data type, startDate and endDate is of Date format, firstName and LastName, businessUnit, employeeStatus, employeeType which is of string, current Employee Rating which is of numeric data type.

By Using these features and columns, the analysis aims to provide a detailed understanding of employee tenure, performance, and turnover, helping the company make informed decisions to optimize workforce management and enhance organizational effectiveness.

THE "WOW" IN OUR SOLUTION

Our solution for tenure analysis delivers the "WOW" factor by transforming raw employee data into actionable insights that drive meaningful improvements in workforce management and organizational effectiveness.

We provide a comprehensive analysis of employee tenure, performance, and turnover, offering a 360-degree view of the employee lifecycle.

By providing a detailed, data-driven understanding of tenure and performance, we empower the company to make informed decisions that foster a more productive, engaged, and satisfied workforce.

Tenure Calculation : IF(ISBLANK(ExitDate),
DATEDIF(StartDate, TODAY(), "y"), DATEDIF(StartDate,
ExitDate, "y"))



MODELLING

Data Collection:

The data for the tenure analysis was collected from Kaggle employee Dataset. The dataset includes various employee-related features, such as StartDate, ExitDate, EmployeeStatus, Performance Score, GenderCode, and others, which provide a comprehensive view of employee demographics, job roles, and performance.

Feature Selection:

Feature selection involved identifying the most relevant columns from the dataset that would aid in calculating and analyzing employee tenure. The key features selected for tenure analysis include:

- StartDate and ExitDate: Crucial for calculating the duration of employment.
- Current Employee Rating: Provides insights into how tenure relates to performance.
- GenderCode: Used to explore tenure patterns across different genders.
- EmployeeStatus: Helps distinguish between current and former employees, ensuring accurate tenure calculations.

These features were chosen because they directly impact or provide context for employee tenure and performance, allowing for a detailed and meaningful analysis.

MODELLING

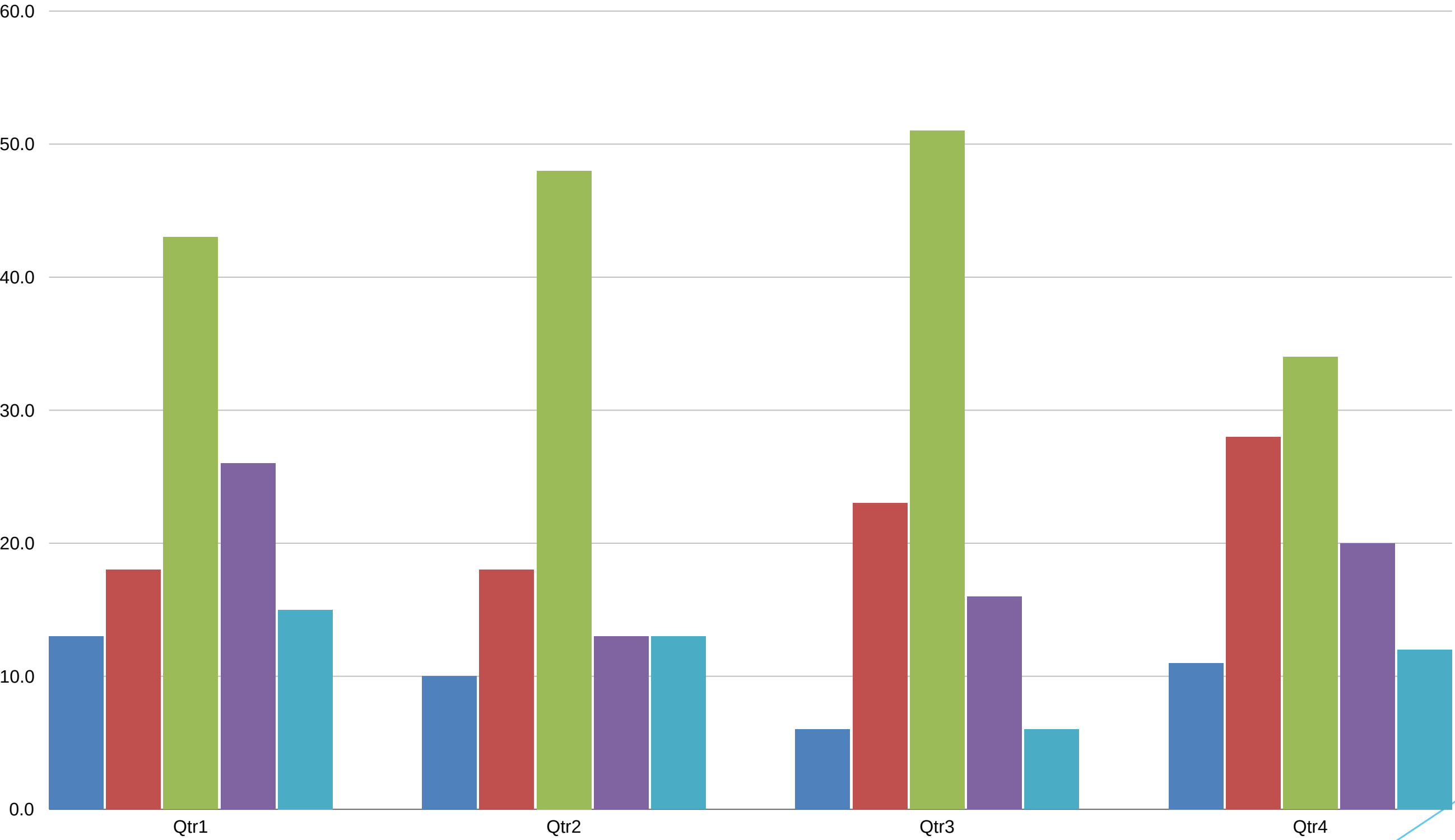
Tenure Analysis Calculation:

- The tenure analysis was calculated using the following approach:
- Tenure Calculation: Used the formula `DATEDIF(StartDate, ExitDate, "y")` to compute the duration of employment in years. For employees still with the company, tenure was calculated up to the current date using `DATEDIF(StartDate, TODAY(), "y")`.
- Data Integration: Combined tenure data with performance ratings and demographic information to analyze how tenure affects employee ratings and to identify patterns across different groups.

Pivot Table Generation

- Organized the data in Excel with columns for Tenure, Current Employee Rating, and GenderCode.
- Inserted a pivot table to summarize data by tenure, performance rating, and gender. This allowed for aggregation and comparison of metrics across different segments.

Result



conclusion

The tenure calculation provides valuable insights into employee retention and turnover patterns within the organization. By accurately determining the duration of employees' service with the company, we can identify trends and correlations that inform strategic HR decisions.

The insights gained from tenure analysis support strategic planning for talent management, succession planning, and workforce development, helping to ensure a stable and high-performing workforce.

Areas for Improvement:

Integrate supplementary data such as employee engagement scores and training participation. This will provide a richer context for understanding tenure trends and their impact on performance.

Perform detailed analysis by job function, department, and location to uncover specific patterns and trends. Utilize pivot tables and dashboards to gain deeper insights into employee retention and turnover.