**D599 Task 1 Scenario**

**Scenario: Employee Turnover**

The highly competitive technology industry relies on the availability of quality employees, and the retainment of these highly skilled workers is a primary business goal. The term "employee turnover" is defined as the total number of workers who leave a company over a certain period, either voluntarily or involuntarily.

It costs much less to retain a worker than to recruit, onboard, and train a new one. On average, the cost of replacing a worker is equivalent to paying 6–9 months of the worker's salary. To reduce employee turnover, tech businesses need to understand turnover to design smarter employee retention strategies.

As a member of a team of analysts in a large, multinational tech company, you have been asked to profile and clean the dataset to optimize it for future analysis.

**Data Dictionary**

* **Age:** Age of the employee, as reported in human resources' contact information
* **Turnover:** Whether the employee has left within the last year (yes, no)
* **BusinessTravel:** Whether the employee travels for business (yes, no)
* **DailyRate:** The employee's daily pay rate in U.S. dollars
* **Department:** The employee's organizational department
* **DistanceFromHome:** Commuting distance in miles
* **Education:** The employee's educational level on a scale of 1–5 (1 = undergraduate; 5 = post-graduate)
* **EducationField:** The employee's educational field of study
* **EmployeeCount:** = 1
* **EmployeeNumber:** Identifying number (between 1 and 10,000)
* **EnvironmentSatisfaction:** Employee office satisfaction rating on a scale of 1–4 (1 = highly dissatisfied; 4 = highly satisfied)
* **Gender:** The employee's gender (male, female)
* **HourlyRate:** The employee's hourly rate of pay
* **JobInvolvement:** The employee's job involvement on a scale of 1–4 (1 = little involvement; 4 = very involved)
* **JobLevel:** The employee's level in the organizational hierarchy on a scale of 1–5 (1 = entry level; 5 = executive level)
* **JobRole:** The employee's organizational role
* **JobSatisfaction:** Employee job satisfaction on a scale of 1–4 (1 = highly dissatisfied; 4 = highly satisfied)
* **MaritalStatus:** The employee's marital status (single, divorced, married)
* **MonthlyIncome:** The employee's net monthly rate of pay
* **MonthlyRate:** The employee's gross monthly earnings
* **NumCompaniesWorked:** The employee's company work history
* **Over18:** Whether the employee is 18 years of age (yes, no)
* **OverTime:** Whether the employee works overtime (yes, no)
* **PercentSalaryHike:** The annual percentage increase in an employee's current salary
* **PerformanceRating:** The employee's performance rating, based on their manager's annual performance review, on a scale of 1–4 (1 = improvement required; 4 = exceeds expectations)
* **RelationshipSatisfaction:** Whether an employee is satisfied with colleague relationships on a scale of 1–4 (1 = unsatisfied; 4 = highly satisfied)
* **StandardHours:** The employee's biweekly approved hours of work
* **StockOptionalLevel:** The employee’s company stock options on a scale of 1–4 (1 = minimum; 4 = maximum)
* **TotalWorkingYears:** The employee's lifetime years working
* **TrainingTimesLastYear:** The employee's training sessions from the previous year
* **WorkLifeBalance:** The employee's perception of work-life balance, as captured in an all-staff survey, on a scale of 1–4 (1 = work-life balance is unsatisfactory; 4 = work-life balance is very satisfactory)
* **YearsAtCompany:** The employee's tenure in years at the company
* **YearsInCurrentRole:** The employee's years spent in their current role
* **YearsSinceLastPromotion:** The number of years since the employee's last promotion
* **YearsWithCurrManager:** The employee’s time spent in years with the current manager