

Scenario Based Learning

A company works with a number of employees, all the works are dependent on the employees. Even if one of the employees resign the job immediately then the assigned work will be not finished at the time, so delivery of the project to the clients will be delayed. Company planned to make solution for this, they want to know which employee may resign next. If they know previously, they can arrange alternative to avoid such problem.

As an AI Engineer you must give Solution to this.

A) How will you achieve this in AI?

In order to find whether the employee will sustain in the company or not, we can easily spot this based on employee surveys. This survey can be consists of some simple questions about the job role, interest, recent achievement with 5 rating. Each employee would provide rating for each quarter (q1,q2,q3 & q4). We can keep track of each quarter rating and if the overall rating goes down its easily understood that the employee is disturbed and not willing to stay. We can find either by each or bi-quartlerly report. Based on this we can find whether employee will stay or not and then we can make a backup plan if the employee is very sure to resing

Survey Design:

A survey consists of 5 key questions on topics such as:

- Job Role Satisfaction
- Interest in Current Work
- Alignment with Career Goals
- Recent Achievements
- Engagement with the Team/Manager

Quarterly Data Collection:

Employees will submit ratings (1-5) every quarter: Q1, Q2, Q3, and Q4.

Trend Analysis:

Track employee ratings over time. A decline in quarterly scores might signal disengagement or dissatisfaction.

Bi-Quarterly or Annual Reports:

Managers can generate reports quarterly or bi-quarterly to monitor feedback trends. If scores decline steadily, it may indicate that the employee is considering leaving.

B) Find out the 3 -Stage of Problem Identification

Stage 1 - Machine learning (since my data is dealing with numbers)

Stage 2 - Supervised (since my dataset has input and output, which is clear that this can be supervised)

Stage 3 - Classification (since the data can be grouped or classified based on the rating)

C) Name the project

Proactive Talent Management

D) Create the dummy Dataset

Employee_ID	Q1	Q2	Q3	Q4	Avg_Rating	Status
E001	4	4	3	2	3.25	At Risk
E002	5	4	4	5	4.5	Stable
E003	3	2	3	2	2.5	At Risk
E004	5	5	5	5	5.0	Stable