

Model Development Phase Template

Date	9 July 2024
Team ID	SWTID1720104839
Project Title	Human Resource Management: Predicting Employee Promotions Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
Employee id	ID for employee	No	It is unique for everyone and does not provide any predictive value for promotion

Department	Department of Employee	Yes	<p>Department impacts promotion due to factors such as departmental budgets, priorities, skills, leadership and networking</p> <p>Promotion criteria differs from one dept to other</p>
Region	Region of employment	No	Region of employment does not effect promotion due to standardized promotional process
Education	Education level	Yes	<p>Education level is considered for promotion because it is often seen as a proxy for an individual's skills, knowledge, and ability to take on more complex and challenging roles, and it can also indicate a level of commitment and motivation to personal and professional development.</p>
Gender	Gender of employee	No	<p>Gender should not affect promotion decisions as it is an irrelevant factor in determining an individual's ability to perform a job</p>
No of trainings	No of trainings attended	Yes	<p>The number of trainings attended can impact promotion because it demonstrates an employee's commitment to personal and professional development, and acquiring new skills and knowledge can make them more competent and qualified for advanced roles.</p>

Age	Age of an employee	Yes	Age can impact promotion because it is often associated with experience, maturity, and a deeper understanding of the organization and industry
Previous year rating	Performance rating of previous years	Yes	Previous year's rating can impact promotion because it reflects an employee's past performance, work quality, and ability to meet expectations
Length of service	Duration of service	Yes	Length of service can impact promotion because it often correlates with institutional knowledge, loyalty, and a deeper understanding of the organization's culture and operations, making long-tenured employees more likely to be considered for leadership roles
Awards won	No of awards won	Yes	Awards won can impact promotion because they demonstrate exceptional performance, innovation, and achievement, showcasing an employee's capabilities and value to the organization, and making them a more attractive candidate for advancement opportunities
Average training score	Average of training score	Yes	Average training score can impact promotion because it reflects an employee's commitment to learning and development, ability to adapt to new skills, and potential to take on more responsibilities, making them a more competitive candidate for promotion

Is promoted	Promotion status	Yes	This the target variable for prediction model
--------------------	-------------------------	------------	---