

Project Design Phase-1  
Proposed Solution Template

Date	22-10-2022
Team ID	PNT2022TMID03757
Project Name	Corporate Employee Attrition Analytics
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.NO	PARAMETER	DESCRIPTION
1.	Problem Statement (Problem to be solved)	<p>Employee turnover is now a significant problem for a company's competitive advantage. The most crucial component of every corporation is its workforce. Successful employees meet deadlines, generate revenue, and enhance the brand through satisfying encounters with clients. The cost of finding, hiring, and training new employees is very high. It is more economical for a corporation to retain its current workforce. To keep its staff for a longer term, a business must maintain a pleasant working environment. It was done manually a few years ago, but now we live in the age of machine learning and data analytics. The hr department of a corporation now makes use of a data analytics tool to determine which processes need to be changed in order to keep the majority of its personnel.</p>
2.	Idea / Solution description	<p>The proposed system is being implemented using machine learning, one of the applications of artificial intelligence, as a solution to the issue. Based on employee happiness, the workplace environment, and other factors, the employee attrition analysis system will forecast the attrition rate. Finding an employee's mood is a difficult process. Identifying daily mood recognition, emotion detection, the surroundings, the need for a hike, employee contentment, employee contribution, and job development are other crucial factors. This predictor has been presented as a solution to all of these problems.</p>

3.	Novelty / Uniqueness	The field of smart and contemporary employee sentiment analysis is currently undergoing a lot of research and development. The ensemble machine learning approach known as gradient boosting, can be utilized to create the predictor model. These are the models used to forecast the attrition rate of employees.
4.	Social Impact / Customer Satisfaction	Management, industrial people, other sectors, job-seekers, hr, team leads, clients.
5.	Business Model (Revenue Model)	It is simpler for hr and management since it produces results with the least amount of effort and time when predicting the employee turnover rate and analyzing mood and emotions. This deed greatly benefits both the business and society as a whole.
6.	Scalability of the Solution	A variety of corporate companies must store, evaluate, and take action on the massive amounts of data being produced by the employees who work for them as it expands quickly.