Project Design Phase-I Proposed Solution Template

Date	16 October 2022
Team ID	PNT2022TMID36081
Project Name	Corporate Employee Attrition Analytics
Mentors	Faculty mentor: vinayagam.V.
	Industry mentor: Shanawaz Anwar

Proposed Solution Template:

S.No. Parameter	Description
1. Problem Statement (Problem to be solved)	Over the past two years, this type of analytic practice has become indispensable. Global labour markets have swung dramatically due to the COVID-19 pandemic. In addressing the ongoing challenges of the pandemic and the rise of remote work, employee attrition analytics will remain important to organizations seeking to retain top talent. Employee attrition analytics is specifically focused on identifying why employees voluntarily leave, what might have prevented them from leaving, and how we can use data to predict attrition risk.

2.	Idea / Solution description	
		Data analysis can be used to establish internal employee turnover benchmarks. Tracking these benchmarks over time can reveal how the employee experience is changing for better or worse, if the reasons employees are leaving have changed, or if the attrition pattern or time cycle is different. These benchmarks will
		illustrate whether the actions the organization is taking to reduce attrition are effective, alerting leaders and managers to make adjustments or take different targeted actions if needed. We can use K nearest algorithm to load, visualize, pre process the data .Using KNeighborsClassifier for finding the best number of neighbour with the help of misclassification error.
3.	Novelty / Uniqueness	We consider three types of attritions here and try to solve the problems of overcoming it.
		Voluntary- When an employee leaves the company for a better job opportunity or career growth or more pay, and leaves on his own.
		Involuntary- If an employee is terminated from a job due to some ethical issue or lack or performance. Sometimes, a degrowing business also forces employees to quit the job, which leads to a higher rate of people leaving.
		Retirement- Once an employee finishes his/her tenure at a company and retires. This is mostly a natural attrition that occurs and companies are prepared with succession planning.
4.	Social Impact / Customer Satisfaction	This helps the corporate in learning the reasons for attrition, understanding different types of attrition, trying to limit the attrition through various techniques.

5.	Business Model (Revenue Model)	This project would be a profitable one for the corporate as Attrition is something which every company faces especially in this post covid period
6.	Scalability of the Solution	Initially this model is focused on a small number of companies in the development phase. Once its successful ,the number of users increases so we can use cloud for higher storage of the large datasets of each company