Project Initialization and Planning Phase

Date	4th July 2024
Team ID	739983
Project Title	Cost Prediction of Acquiring a Customer
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

In using machine learning to predict customer acquisition costs (CAC), advanced algorithms study past data to estimate how much it will cost to get new customers. By looking at patterns in past marketing, sales, and operational data, these models can predict CAC more accurately than older ways of doing it. This helps businesses use their resources better, improve how they market, and make more money from getting new customers.

Project Overview	
Objective	To Predict the Cost required to acquire a customer for a convenience store or a supermarket.
Scope	Cost determines if the customer is or could have the potential to become a Regular customer.
Problem Statement	
Description	To predict the cost that will determine the permanent acquisition of a customer.
Impact	Increase in number of customers on a daily basis which leads to increase in sales and profits quarterly.
Proposed Solution	
Approach	Using the data of sales and customers through the dataset and run Machine Learning(ML) model to predict the cost of acquiring a new customer.
Key Features	The ML model uses particular parameters, eg; store city, food category etc.. to determine new customer's cost.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	e.g., 11thGen Intel(R) Core i3, 2
Memory	RAM specifications	e.g., 8 GB
Storage	Disk space for data, models, and logs	e.g., 1 TB SSD
Software		
Frameworks	Python frameworks	e.g., Flask
Libraries	Additional libraries	e.g., numpy,pandas,sklearn..
Development Environment	IDE, version control	e.g., Google Colab,Spyder
Data		
Data	Source, size, format	e.g., Kaggle dataset, excel sheet