TVS CREDIT
e.p.i.c 6
ENRICH | PERFORM | INNOVATE | CHALLENGE

Usher in the EPIC wave

Case Study

Introduction –

As a customer centric organization, our working philosophy revolves around providing the best products and associated services to our customers. Since Lending is a continuous activity, it is of paramount importance that we remain in regular contact with our customers. We have various channels through which a customer can reach out to us. The primary channels being Phone Call, WhatsApp and Chatbot.

Data – Click here to download

The data describes the logs of various inbound messages received across multiple channels over a 6-month period.

Data Dictionary –

Field Name	Description
Id_new	Unique ID of a customer
MOB_DIFF	Time in months as a TVS Credit customer
State	Numbers/Labels indicating the different states and union territories of India
Hour	The field indicates the hour of the day when an enquiry was made, values can range from 0-23
Enqgrp2	Reason why a customer made an enquiry, some common types are – NOC – No Objection Certificate Statement – Any kind of statement request Payment – Any payment related enquiry Login – An indicator that simply says that the customer logged into his account, doesn't equate to an enquiry. NLP Fail – Customer's typed message was not parsed correctly by the system
DAY_DIFF	An indirect way to identify the day of the period under consideration, values range from 1-180
AGE_BAND_NEW	A label indicating the age group to which the customer belongs
Location	A classification to identify if the customer is located at a rural or urban area, Takes numerical labels to identify multiple locations like, Rural , Semi-Rural , Metropolics etc.
Cbs_band	CIBIL Score band – A numerical label to classify customers as per their Cibil scores
chan	Channel of contact – 3 channels in total, Phone Call, WhatsApp, Chatbot
gendr	Gender of customer – Takes values as 0/1
portf	Portfolio – Product Portfolios

*A number of these fields have numerical labels rather than the actual values; this is done to abide by compliance and data privacy rules.

* Since this problem statement is under the vertical of Customer Service, candidates are advised to explore the Chatbot and WhatsApp channels of TVS Credit to better familiarize themselves with the system and think from the perspective of the customer

Problem Statement –

Propose a methodology/framework to –

- Predict – For each customer, what is the likelihood of them making their next outreach through each of the 3 channels i.e. phone, WhatsApp and Chatbot. Candidates are expected to come up with a probability for each channel for each customer. A modelling approach is strongly recommended.
  NOTE – Candidates are free to define the periods and sampling ratio of train/test data. Candidates must also the decide the window of prediction i.e., likelihood of next enquiry in 15/30/45/60/90 days. They must justify their window of choice.

- Maximize Customer Satisfaction – Customer Satisfaction is a qualitative concept, and the benefits of Customer Satisfaction are often intangible. Candidates are expected to create their own metrics to quantify. E.g. – Quick resolution of queries, correct answer to information asked etc. are instances of Customer Satisfaction.
  NOTE - Candidates can provide a write-up/descriptive answer, but they should back the writings with some calculations and assumptions.

- Identify Business Opportunities – Business opportunities relevant to us are acquiring new customers or by providing an additional loan to an existing customer.