

Capstone Project: Mahindra First Choice

Geological Based Customer Analysis:

Problem Statement – 1:

Identifying the ownership pattern of cars throughout the country. This also captures the problem wherein information regarding the spending patterns can be identified.

Approach:

- Which areas have most cars?
- Which make/car is more popular?
- What is service structure for particular make/car?
- Which type of service is popular in a certain area i.e. repairs or maintenance?


Expected Business Outcome:

Mahindra First Choice Services will be benefited in multiple ways. Knowing the ownership pattern targeted marketing campaigns could be carried out. Knowing the spending patterns services could be suited to the particular spending pattern.

Problem Statement – 2:

Identify the type of order each state receives and present it as an interactive visualization.

Approach:


- What are the different types of services provided?
- What is the difference in each service/labour costing?
- Is the service seasonal or regular?
- Is the service mandatory or not 
- Which service is popular regarding a certain make/car?

Expected Business Outcome:

This could potentially give information about how Mahindra First Choice can be prepared to tackle various seasonal cases.

Market Segmentation:

Problem Statement:

Customer Lifetime Value Prediction – Based on Customer Segments , predict the revenue that can be extracted from each segment over a life of a car – Regression / Time Series. 

Approach:

- Based on customer segments, we can predict how much revenue can be generated from a group.
- What services will a particular group opt for?
- Which make/car is popular among a group/segment?

Expected Business Outcome:

This would be beneficial to Mahindra First Choice Services to identify various segments in the market. Also, these segmentations would allow for targeted marketing activities and sales promotions.

Recommended Problem Statements:

1. Inventory Management and Recommendations.

Approach:

- Which inventory item is highly used?
- Which state/area is the inventory in high demand?
- Which make/car is the inventory item used by most?
- Which category of customer is the inventory item required by?
- Which inventory item could be required or would be in high demand in future by forecasting.

2. Marketing Recommendations.

Approach:

- Which marketing source is responsible in bringing which type of customer?
- Which marketing source brings the most business?
- What is the average income per source?
- Which source has the most reach?

3. Customer Prediction Based on Historic Data.

Approach:

- What type of customers are to be expected?
- Which make/car are to be expected the most?
- What kind of services would be required the most?
- Which inventory items should be brought in extra to take care of the demand later?
- Which marketing source is to be invested in for better reach to bring more business?