CLTV modeling for a car service center chain

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Client

A chain of car service centers based in the Middle East.

Opportunity

The client was interested in fine-tuning its location and merchandising strategy at aggregate and store levels. The aim was to identify an optimal combination of store locations and merchandising that would maximize the client's profit over the long term.

Value Delivered

1 SG Analytics delivered a model that predicted CLTV under variable input factors, such as store locations and merchandising strategy, on a service center and aggregate level.

2 The model helped the client segment current valuable customers and identify customers who were likely to become more valuable, given changes in the location and merchandising strategies.

Solution

SG Analytics supported the client by leveraging a combination of market research and data analytics methodologies. The aim was to create a predictive model for customer lifetime values (CLTV) depending on various factors such as store location, merchandise selection and strategy, price positioning, and competition.

PRIMARY RESEARCH

- SG Analytics' primary research analysts conducted CATI interviews with internal/external industry experts including managers of car service centers, car dealerships, and gas stations to assess prevailing market dynamics and the competitive landscape.

- The team also designed and conducted CAWI interviews with consumers to gain an in-depth understanding of their needs, expectations, and trends.

DATA ANALYTICS

- SG Analytics obtained the client's transaction records from the last 5 years. Our data scientists cleansed the data and structured it for further processing.

- The team identified 12 different metrics to calculate and assign a weighted score to each customer. The set of metrics included factors such as car repairment spent, distance to the next car service center, car model category, car age, etc. Based on the assigned scores, the team ranked all existing customers and segregated them into deciles.

- The team assessed the timeframe of each transaction and categorized them across different time periods. Based on the sample data, we deployed statistical methods to model the probability distribution of the number of transactions in a service center depending on the number of car owners in its catchment area.

- We designed a tool to calculate the corresponding Net Profit Value using assumptions derived from our primary research. Then, our team subtracted the average cost of marketing/retention as estimated by the client to calculate the CLTV for each customer.

To know more about our Customer Analytics Services write to us on **dataanalaytics@sganalytics.com** or contact us on **+1 315 503 4760**