

Marketing Decision Analysis

Sample exam problem

Carnegie mart is a privately owned grocery store in the Melbourne suburb of Carnegie. It earns \$300 contribution margin per customer every year on an average. The store currently has about 1000 regular customers and it loses 10% of customers every year to competition. To improve its market position, Carnegie mart is considering two strategies

1. An advertisement campaign targeted at 4000 residents at a cost of \$100,000. The campaign is expected to bring additional 400 customers to the store.
2. A loyalty program to reward its existing customers which is expected to cost \$10 per customer per year (\$10,000 in first year) and is expected to help retain half of the defecting customers.

Analyze whether acquisition or retention would be the best strategy for Carnegie mart. You can assume a discount rate of 10%. For simplicity, treat that margins are realized at the end of each year.

Solution:

Strategy 1

Margin per customer = \$300

Attrition rate = $100/1000 = 10\%$

Retention rate = $1 - \text{attrition rate} = 90\%$

$$\text{CLV} = \text{Margin} * ((\text{retention rate} / (1 + \text{discount rate} - \text{retention rate}))) = 300 * [(.9) / (1 + 0.1 - 0.9)] = \$1350$$

Acquisition rate = $400/4000 = 10\%$

Prospect lifetime value = Acquisition rate * (Initial margin + CLV) – Acquisition spending per customer. In this case, all payments are made at the end of year and there is no initial margin,

$$\text{PLV} = 0.10 * [1350] - (100,000/4,000) = \$110$$

As the prospect lifetime value is > 0 , it is worth prospecting for new clients.

In strategy 1, \$100,000 is spent to acquire 400 new customers whose lifetime value is \$1350. So, the value generated by this strategy is $400 * \$1350 - \$100,000 = \$440,000$.

The total value of all customers of the firm now is $1000 * \$1350 + \$440,000 = \$1.79\text{M}$.

Strategy 2

\$10 per customer is spent to cut the attrition rate to half. The new retention rate now is 0.95 and the new margin from customers is \$290 (if we subtract the retention investment of \$10 from the margin from customer).

The CLV of each customer now is, $CLV = 290 * (.95) / (1+0.1-0.95) = \1837 .

The total value from strategy 2 now will be $= 1000 * \$1837 = \$1.837M$.

So, strategy 2 yields higher total value to the firm than strategy 1 and is therefore the recommended strategy.