AUTOPLUS INSURANCE ANALYSIS

Leading insurance company AUTOPLUS Insurance offers coverage across many US states.

AUTOPLUS is dedicated to protecting your travels and giving you roadside peace of mind. With an unwavering commitment to customer satisfaction and a thorough comprehension of your individual needs. They work to earn your trust as you navigate the uncertainties of life.

The company has a total customer of 9,134 across the following state: Arizona, California, Nevada, Oregon and Washington.

The following analysis was conducted and key insight was generated using Microsoft Excel.

In this case study, the focus was to generate key insight from the data gathered in order for the company to improve its customer satisfaction and retention by understanding customer behavior and preferences better.

Also, it's of our interest to create an interactive Excel dashboard that provides valuable insights into customer demographics, policy information, and customer interactions to enable the company to make data driven decisions and implement strategies to enhance customer experience and increase policy renewals

As slated, out of the total, 9,134 customers, 4,476 representing (49.04%) are Male and 4,658 representing (50.96%) are Female.

The customer base of the insurance company is relatively balanced in terms of gender, with slightly more female customers than male customers. This could be an important factor to consider in terms of marketing, product offerings, and customer service tailored to the preferences and needs of both genders.

The average claim amounts for Male and Female differ, with Female having a higher average claim amount than Male. Average Claim Amount for the Male stand at \$412.86 and the Average Claim Amount for Female is \$456.18. This could indicate that, the Female customers are making claims for higher amounts possibly due to different demographics or coverage plans. The company might want to investigate the reasons behind this difference and ensure that the pricing and coverage offered align with the claim's patterns of each gender.

The average claim amount of \$434.06 indicates the average value of claims made by the customers. This is an important metric for assessing the financial health of the insurance company, as it helps gauge the potential liabilities the company might face due to claims.

Average Monthly Premium Trend:

The average monthly premium values vary throughout the data, ranging from a low of 87.489 to a high of 100.402. The overall average across all data points is approximately 93.22.

The trend of average monthly premiums seems to fluctuate without a clear increasing or decreasing pattern. Some months have premiums below the overall average, while others are above it. This could be influenced by factors such as changes in policy offerings, marketing efforts, economic conditions, or customer demographics.

Total Claim Amount Trend:

The total claim amounts also show variability across the data points, ranging from a low of 57567.45 to a high of 161173.26. The overall total claim amount is approximately 3,964,967.05.

Similar to the average monthly premiums, the trend of total claim amounts does not exhibit a consistent upward or downward trajectory. There are fluctuations in claim amounts over the months, suggesting that the frequency and severity of claims vary over time.

While there isn't a clear linear relationship between the average monthly premiums and total claim amounts, it's important to consider that insurance is inherently complex and influenced by various factors. The absence of a direct correlation might be due to other variables at play, such as different types of insurance products, customer behaviors, external events, and seasonal factors.

Offer Distribution across Coverage:

Offer1 is most prominent in both Basic and Extended coverage, with 28% and 13% respectively. In Premium coverage, it represents 5%.

Offer2 has a consistent distribution across all coverage types, with percentages of 32% (Basic), 16% (Extended), and 4% (Premium).

Offer3 has a minimal presence across all coverage types, accounting for 1%.

Coverage Type Distribution:

Basic coverage has the highest variation in offer distribution (Offer1 and Offer2), suggesting a diverse range of options for customers opting for basic coverage.

Extended coverage also maintains a relatively balanced distribution of offers, but with lower percentages than Basic.

Premium coverage has the smallest range of offer distribution, with Offer1 having the highest percentage.

Clam and complaints by Vehicle Type

Analyze whether certain vehicle types consistently receive more complaints. Are there specific issues or trends driving customer dissatisfaction?

Luxury Car has the highest average claim amount, followed by Luxury SUV and SUV. These segments seem to have higher average claim amounts compared to other vehicle types. Small and Medsize cars tend to have lower average claim amounts.

Total Open Complaints:

SUV has the highest number of open complaints, followed by Four-Door Car and Two-Door Car. These segments have a relatively higher number of customer complaints. Luxury Car and Luxury SUV have fewer open complaints, possibly due to their higher-end nature.

Large Vehicle Types:

There are large vehicle types within multiple categories (Large, Luxury Car, Luxury SUV). They seem to have varying claim amounts and open complaints. This could suggest differences in the causes of claims and complaints across different types of large vehicles.

Customer life Value by employment and Marital status.

Observations:

For each employment and marital status category, the total customer lifetime value is the sum of the values for Employed, Single, and Married.

Employed customers tend to have the highest cumulative lifetime value across all marital statuses. The Married status consistently shows the highest cumulative lifetime value across different employment categories. Unemployed Single customers have the highest cumulative lifetime value among the Unemployed group, followed by Unemployed Married customers.

Positive Response Rate:

Among the different sales channels (Agent, Branch, Call Center, Web), the highest positive response rate is observed in the Agent channel with 666 out of 3477 customers responding positively (approximately 19.16%).

The highest number of no responses (negative responses) is observed in the Agent channel with 2811 out of 3477 customers not responding positively (approximately 80.84%).

The Agent channel has the highest total number of customers, followed by the Branch, Call Center, and Web channels. The Call Center and Web channels have relatively lower positive response rates compared to the Agent and Branch channels.

In summary,

- ✓ The insurance company has a relatively balanced gender distribution among its customers, with slightly more women than men.
- ✓ The company has a diverse customer base with varying premium amounts and claim patterns.
- ✓ The relationship between average monthly premiums and total claim amounts is complex and not linear.
- ✓ The highest cumulative lifetime value is associated with employed and married customers.
- ✓ Employed customers tend to have the highest lifetime value across all marital statuses.
- ✓ Unemployed single customers have the highest lifetime value among the unemployed group.
- ✓ The sales agent channel has the highest positive response rate, indicating better performance in generating positive customer responses.
- ✓ Offer1 and Offer2 are consistently distributed across different coverage types.
- ✓ The distribution of offer types varies across coverage types, indicating a tailored approach based on coverage.
- ✓ Claim amounts and open complaints vary by vehicle type.
- ✓ Certain vehicle types, such as luxury cars, tend to have higher claim amounts and fewer complaints.

These assessments have shed light on market trends, business performance, and consumer behavior. Nevertheless, additional research, such as correlation analysis, customer segmentation, and competition benchmarking, might result in more specific strategic recommendations. Based on these insights, the business should think about modifying its marketing, product offers, and customer interaction methods to improve operations and overall success.