

Unicorn Company

Introduction

Through the analysis of the Unicorn company's database, I identified two primary issues whose resolution can secure the company's growth. I delivered a presentation to the company's CEO, outlining these issues and my recommendations for addressing them.

The company's profitability shows an average growth of 12.6% per year but exhibits certain weaknesses: in the months with the highest sales figures, the company's profitability is negative. Furthermore, I conducted a geographical analysis of the company's operations, identifying the five most profitable states as well as ten states that cause losses for the company despite high sales volumes.

Analysis of Key Issues and Recommendations

I determined that the discount policy is the main factor causing the company's sales to result in losses. I recommended completely eliminating discounts exceeding 20%. Additionally, discounts should be entirely abolished in the "Tables," "Supplies," and "Storage" subcategories, as discounts in these categories lead to losses. Implementing these recommendations will not only increase the company's profits but also make previously unprofitable states profitable.

As a second avenue for the company's growth, I see the expansion of the customer base. The company has achieved significant success in customer loyalty, with over 92% of buyers placing orders in 2018. However, the growth in new customers was only 11 individuals. I recommended implementing a new advertising campaign similar to the one in the first fiscal year, which brought the company nearly 75% of its current customer base.

Predictive Analysis

A predictive analysis was also conducted, showing that an increase of 100 customers would lead to a profit growth of 13,412, representing a 14.4% increase compared to 2018. Eliminating discounts greater than 20% (assuming all discounts exceeding this value are replaced by a 20% discount) would generate additional revenue of over 240,000, more than doubling the company's profitability by 2.5 times.

I was unable to consider the impact of discount size on sales volumes, as this would require additional data, such as a detailed analysis of customer behavior in response to changes in discount size, as well as a comparison of the company's prices with those of competitors.

I also calculated a similar forecast for the unprofitable states and concluded that expanding the customer base in these states without simultaneously adjusting the discount policy would lead to an increase in their unprofitability.

Data Quality

Regarding data cleaning issues, I identified minor inconsistencies in the supplier names: the indication of the same name with and without a period, as well as the use of product names instead of supplier names. These values should be cleaned if a detailed product analysis is required.

Furthermore, the database lacks information on the original unit price of the goods. This data was calculated using an additional Calculated Field.

Links

[Google Sheets](#)

[Google Colab](#)

[Tableau](#)

[Tableau Story Description](#)