

Project Unicorn



Project Summary: Analysis of Profitability in the Central Region

Introduction

The aim of this project was to investigate the cause of low profitability in the Central Region by analysing profit ratios across regions, states and product categories. The aim was to identify areas of underperformance and recommend strategies to improve profitability.

Methodology

We began by analysing the profitability of each region using a combination of key metrics such as total sales, profit and profit ratio. The Central region was identified as the weakest, despite high sales volumes. Further analysis at a state level highlighted Texas and Illinois as the main contributors to the region's underperformance. The performance of key product categories and sub-categories within these states was then examined, focusing on how pricing and discounting practices affected earnings.

Key Findings

- **State level insight:** Texas and Illinois were identified as key contributors to the Central region's poor performance, with consistently negative profit ratios across key product categories.
- **Category level drivers:** Both the Furniture and Office Supplies categories showed persistently negative profit ratios in Texas and Illinois, with the most severe problems observed in the Office Supplies category.
- **Product-level analysis:** Within Office Supplies, 52 products were found to have negative Profit Ratios even after discounting was removed. Most of these products had

low sales volumes, an indication of limited market demand and strong candidates for discontinuation.

- **Impact of rebate practices:** Heavy discounting was a significant driver of losses in both categories, particularly in heavily discounted sub-categories such as furniture and office supplies.
-

Recommendations

- **Discontinue unprofitable products:**

In the Office Supplies category, discontinue the 52 products that have a persistently negative profit ratio, even when no discounts are applied, and that have sales of less than \$2,000 over the analysis period. These products are strong candidates for discontinuation because they show limited market demand.

Apply the same product-level analysis to the Furniture category to identify all products with low sales and persistently negative profit ratios, even when discounts are removed. These should also be considered for discontinuation.

- **Optimise and target discount adjustments:**

Re-evaluate and optimise heavily discounted Office Supplies and heavily discounted Furniture subcategories, in particular Furnishing. Focus on selectively reducing or eliminating discounts on products that demonstrate potential profitability without discounting. Priority should be given to categories or sub-categories where small adjustments could yield significant profit improvements.

- **Clarify the source of discounting:**

Determine whether current discounting practices are market driven or internally driven by sales targets that may be damaging the business. Reviewing internal sales policies and aligning them with profitability targets is essential to ensure sustainable performance.

- **Continuous monitoring:**

Implementation of dashboards to continuously track profit ratios, sales performance and the impact of rebates at product level. This will enable the company to proactively identify and address underperforming products before they have an impact on the overall profitability of the business.

Conclusion

In order to restore profitability in the Central Zone, it is essential to eliminate deep discounting and discontinue underperforming products. By targeting those sub-categories and products with persistently negative profit margins and low sales volumes, the company will be able to reduce its losses and improve its performance. Optimisation of the discount strategy, particularly in furniture and office supplies, will be key to the return to profitability. To ensure that future profitability challenges can be quickly identified and addressed, a data-driven continuous monitoring system should be implemented.

Links to prior Analysis

- **SQL Queries:**

<https://colab.research.google.com/drive/1BtzHB0649UzFd8pGfxqWOssTfcXWJ3L5?usp=sharing>

- **SpreadsheetAnalysis:**

<https://docs.google.com/spreadsheets/d/1t2Th2hqrbr0LfBoY63BFFdnzPH4CiR9JTug6VzqFwac/edit?usp=sharing>

- **Presentation:**

https://docs.google.com/presentation/d/1hDdZUHvMmpCBGz6T6ISRlxW5HK_6FVJL/edit?usp=sharing&ouid=107263931505166667487&rtpof=true&sd=true

- **Dashboard:**

Part 1:

https://public.tableau.com/views/ProjectUnicornPart1/Part1?:language=de-DE&publish=yes&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

Part 2:

https://public.tableau.com/views/ProjectUnicornPart2/Part2?:language=de-DE&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

Project Team

Diana Torres

Marcella Valente Ralser

Victoria Cobbah