Unicorn GmbH
Financial Analysis Report for 2015 to 2018

July 11, 2024

This document presents the insights derived from the analysis of orders, products, and customer data for the period from 2015 to 2018. The data was sourced from SQL databases and Google Sheets, with initial business questions addressed using these platforms. Links to these analyses are provided at the end of the document. Subsequently, the data was imported into Tableau for further insights. The findings are categorized into three sections:

Sales and Profit Analysis:
• <u>Total Sales and Profit:</u> The total sales for 2015-2018 amounted to $2,297,355, with a profit of $286,347.
• <u>City Performance:</u> New York City achieved the highest total profit of $18,114 in 2018, while Philadelphia incurred the highest total loss of $8,953.
• <u>State Performance</u>: California and New York were the most profitable states during 2015-2018, whereas Texas experienced the highest losses.
• <u>Discount Impact:</u> High discounts were identified as the primary cause of losses. The average discount across all states was 15.6%, compared to 36.6% in Texas. Sub-categories such as Office Supplies, generally profitable in most states, reported significant losses in Texas due to these discounts.
• <u>Monthly Performance:</u> December 2016 was the most profitable month with an overall profit of $22,010, while December 2018 saw the highest overall loss of $7,339.
• <u>Category Performance:</u> The Furniture category exhibited a very low profit ratio, with tables consistently making losses due to discounts. Chairs and Phones emerged as the top-selling sub-categories, while Copiers and Accessories were the most profitable.

Product and Manufacturer Analysis:
• <u>Top and Bottom Products:</u> The Canon imageCLASS 2200 Advanced Copier was the most profitable product from 2015-2018, while the Cubify CubeX 3D Printer incurred the highest losses. Canon was the top manufacturer, and Cubify was the lowest-performing manufacturer.
• <u>Uncategorized Products:</u> Numerous products lacked manufacturer assignment and were categorized as 'Other'. Improving documentation in this area is recommended.
• <u>Furniture Category:</u> 'Hon Deluxe Fabric Stacking Chairs' was the most profitable product, whereas 'Chromcraft Bull-Nose Wood Table' experienced the highest losses. Consequently, Hon and Chromcraft were the top and bottom manufacturers, respectively.
• <u>Office Supplies Category:</u> 'Fellowes PB500 Binding Machine' generated the highest profit, while 'GBC DocuBind P400 Binding System' resulted in the highest loss. Martin-Yale and Xerox were the top and bottom manufacturers, respectively.
• <u>Technology Category:</u> The 'Canon imageCLASS Advanced Copier' was the most profitable product, while the 'Cubify CubeX 3D Printer' incurred the highest loss. Canon and Cubify were the top and bottom manufacturers, respectively.

Resource Planning:
• <u>Order Frequency:</u> The highest order frequencies were observed in September, November, and December. Resource allocation for the coming years should be adjusted to manage these peak periods effectively.
• <u>2019 Forecast:</u> The highest total orders for 2019 are forecasted for November, with category-specific forecasts as follows: Furniture - 136 orders, Office Supplies - 292 orders, Technology - 151 orders.
• <u>Processing Time Analysis:</u> The processing time between shipping and order date was found to be particularly high (12 days) in cities such as Ontario (California), Bellingham (Washington), and Olathe (Kansas). Infrastructure and human resources in these cities should be analyzed and optimized to reduce processing times.

For further details and access to the analyses conducted on SQL databases and Google Sheets, please download the files from the following link:
https://github.com/smit-k-patel/Project-Unicorn