Sales Overview Dashboard

Executive Summary

This project focuses on developing an automated sales dashboard for a bicycle company, aiming to provide clear insights into sales performance and trends. Key features include a year-on-year sales breakdown, auto-updating capabilities, and metrics tailored for managerial decision-making. The dashboard revealed a significant increase in sales performance, with total revenue up by 41.9% and average order value rising by 31.0%. Despite some challenges, such as underperformance in specific months and categories, strong year-end growth and high-performing brands like Electra underscore promising opportunities. Recommended actions include focusing on high-growth areas, optimizing product portfolios, and addressing seasonal underperformance.

Introduction

The primary objective of this project is to create an intuitive and automated sales dashboard that empowers the sales department with actionable insights. By leveraging SQL Server and Tableau, the project integrates data cleaning, extraction, and visualization processes to present a comprehensive overview of annual sales performance. Key metrics such as total revenue, total orders, and monthly performance trends are incorporated to provide managers with a clear understanding of business dynamics. Designed for a bicycle company, this tool highlights critical areas for improvement and opportunities for growth, ensuring data-driven strategies for success.

Objectives

The aim of this project is to create an automated sales dashboard for sales department that meets the following requirements:

1. *Year Sales Breakdown*: Create an intuitive dashboard to visualize sales performance for year, comparing it to the previous year.

2. *Auto-Updates:* Ensure dashboard can be automatically updated when new data becomes available.
3. *Define KPIs:* Identify important sales metrics to help managers track sales performance.

Methodology

A. Data Collection

The data is assumed to be taken from a bicycle company's database, the steps involved include: using SQL Server to clean and extract necessary data from a database with multiple tables, then bringing that data into Tableau to create a dashboard.

B. Dashboard Building Workflow

Since I am building a sales dashboard, I must implement a workflow to keep everything simple and having a clear goal to approach and reach.

In my particular case the Dashboard building will have 7 sections:
1. Define objectives.
2. Define audience.
3. Select appropriate metrics.
4. Collect and process data.
5. Select dashboard building tools.
6. Design interface.
7. Maintain and improve.

C. Metrics

Since this is a sales dashboard that helps managers have an overview of the business situation of a year, choosing the right metrics for the audience is very important, especially in the context of a bicycle company. The metrics used in the dashboard include:
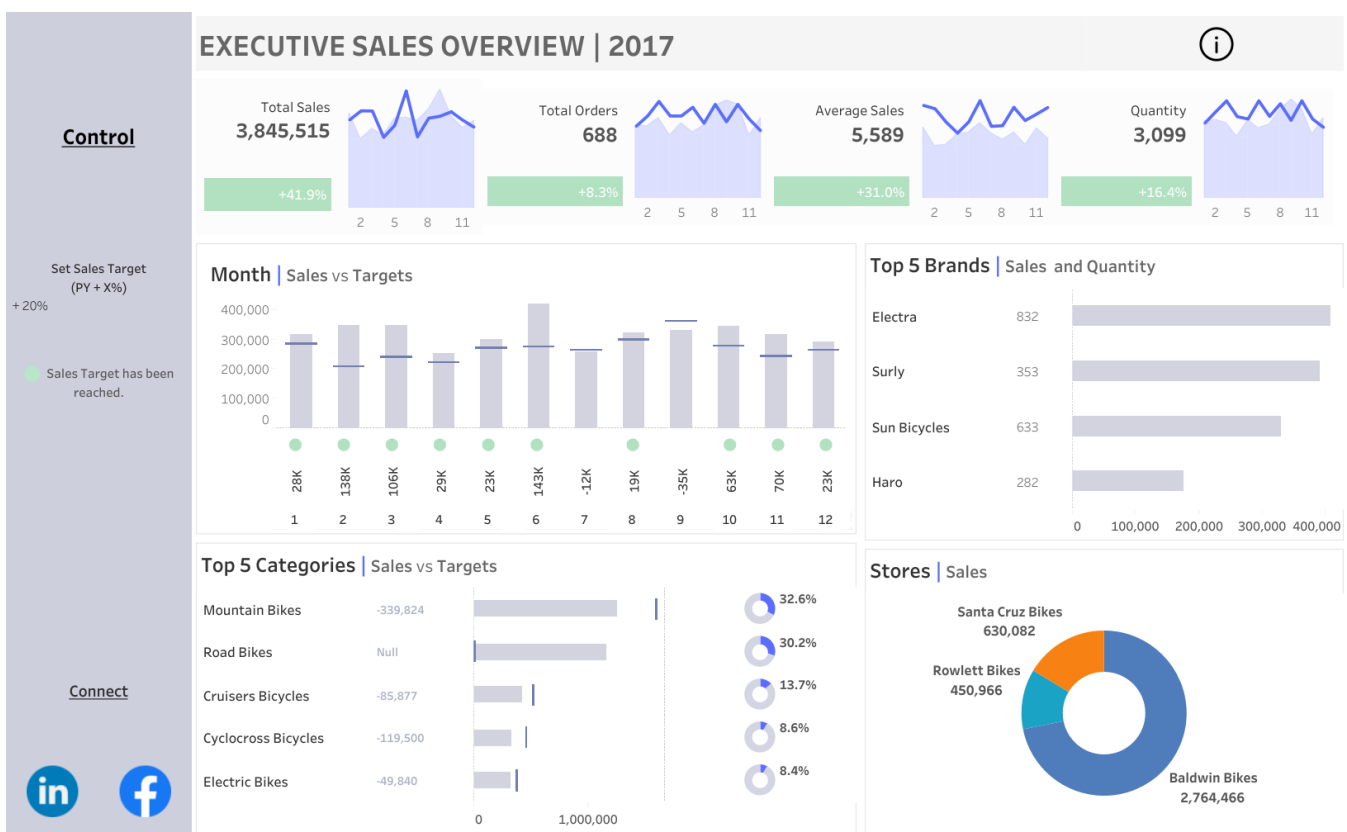
KPIs
- Total revenue
- Total profit

- Total orders
- Average revenue per order

Charts

- Monthly revenue
- Revenue by store
- Revenue and quantity by brands
- Top selling categories

Key Findings

This Dashboard revealed several key insights within the data, including:

1. Overall Performance

Total Sales: 3,845,515, up 41.9% from 2016, and far exceeding the target (PY + 20%). This is an impressive result, showing strong growth in sales.

Total Orders: 688, up 8.3%. Although the number of orders did not increase significantly, it still contributed to the revenue growth, possibly due to the increase in average order value.

Average Sales: 5,589, up 31.0%. This shows that customers are spending more each time they shop, possibly thanks to pricing strategies, upselling, or improving the premium product portfolio.

Total Quantity: 3,099, up 16.4%. This increase is not too high, reflecting that despite the low number of products sold, revenue is still increasing, mainly due to the increase in order value, not just the number of products.

Action:

Maintain the trend of increasing order value: Strengthen sales strategies such as upselling or focusing on premium products.

Continue to optimize the product portfolio: Identify and prioritize the most profitable vehicles, and study customer behavior to improve average order value.
Control costs: With strong revenue growth, it is necessary to ensure that net profit is maintained by controlling costs related to operations and marketing.

2. Monthly Performance

Some months (e.g. July and August) missed targets, with July in particular having a negative gap (-143K to target).

The final months of the year (October and November) exceeded targets, with strong sales growth (e.g. October exceeded target by 70K).

Action:

Analyze the reasons for low sales in the summer (June–August) and consider strategies such as promotions or marketing campaigns during this time.
Take advantage of the power of the year-end peak season by preparing good inventory and optimizing sales resources.

3. Brands

Electra is the best-selling brand with 832 units and the highest sales, Sun Bicycles and Surly also have good sales, but less sales than Electra.

Action:

Focus on developing the Electra brand, while analyzing the factors that lead to success (price, customer segment, quality).

Invest in potential brands like Sun Bicycles to boost overall sales.

4. Categories

Mountain Bikes had the largest negative gap to the target (-339,824).

Road Bikes did not have a Target value to compare to, as they were first sold in 2017, so no previous year data was available. However, this product group still generated impressive revenue, second only to Mountain Bikes.

Cyclocross Bicycles and Electric Bikes also missed the target, with gaps ranging from -85K to -119K.

Action:

Restructure the strategy for Mountain Bikes and Road Bikes: review marketing campaigns, pricing, or market demand.

Focus on developing potential product categories, such as Electric Bikes, to catch up with the electric bike trend.

5. Stores

Baldwin Bikes contributed the majority of sales at 2,764,466, accounting for over 70% of total revenue.

Santa Cruz Bikes and Rowlett Bikes had lower but still significant sales.

<u>Action:</u>

Leverage the strength of Baldwin Bikes, and explore ways to expand its success to other areas.

Invest more in Santa Cruz Bikes and Rowlett Bikes to improve performance.

Conclusion

The sales dashboard successfully met its objectives, delivering valuable insights into the company's performance. It showcased robust revenue growth driven by higher order values and strong brand performance, particularly from Electra. However, challenges like seasonal dips and underperforming product categories highlight areas for improvement. The project's actionable recommendations—such as enhancing sales strategies, optimizing inventory, and focusing on emerging trends—ensure the company can sustain growth while addressing inefficiencies. This dashboard serves as a dynamic tool for monitoring progress and adapting strategies to maximize future success.