

Global Sales & profit Trend Analysis

Project Abstract

- The case study focuses on identifying profit patterns for each product to help clients determine the top-selling items across various regions globally.
- By analyzing these patterns, the client will be able to understand which products are performing best in each region.
- This information will enable the client to make data-driven decisions about which products to prioritize for increased sales.
- The insights from the study will help the client optimize their portfolio by focusing on promoting the most profitable products in each region.
- The client can then apply this knowledge to strategically enhance marketing efforts and drive higher profits in the upcoming year.

Summary on the dataset

- **Order Details:** Each record includes an order ID, order and ship dates, shipping mode, product category, and detailed product information.
- **Product Categories:** The dataset is exclusively for the "Auto & Accessories" category, which includes items such as Car Media Players, Car Speakers, Car Body Covers, Bike Tyres, and Tyres.
- **Sales and Profit:** Sales prices vary from \$54 to \$250. Discounts applied range from 1% to 5%, affecting profits, which vary accordingly. Shipping costs also vary from \$1.80 to \$16.00, depending on the product and order.
- **Order Priority:** Orders are categorized into Critical, High, Medium, and Low priorities. A significant number of orders fall under the Critical and High priority categories.
- **Customer Details:** Orders are made by customers from various regions, including Oceania, Central, North Asia, EMEA, and Africa. Customer segments include Consumer, Corporate, and Home Office, with varying orders by region.
- **Shipping and Delivery:** The shipping mode is consistently First Class, with delivery times ranging from 1 to 10 days.
- **Geographical Distribution:** Customers are spread across multiple countries, including Australia, Germany, New Zealand, the United States, China, Taiwan, and India.

Analysis

Regional Pricing Trends:

- Highest average price.
- Lower average prices.

Opportunity for Price Adjustment:

- Explore promotional pricing in higher-priced regions.
- Consider slight increases in lower-priced regions.

Regional Pricing Strategy Optimization:

- Investigate causes of price differences.
- Adjust based on market demand and cost.

Future Recommendations:

- Analyze regional economic conditions and competition.
- Implement feedback loops for continuous pricing adjustments.

About Me

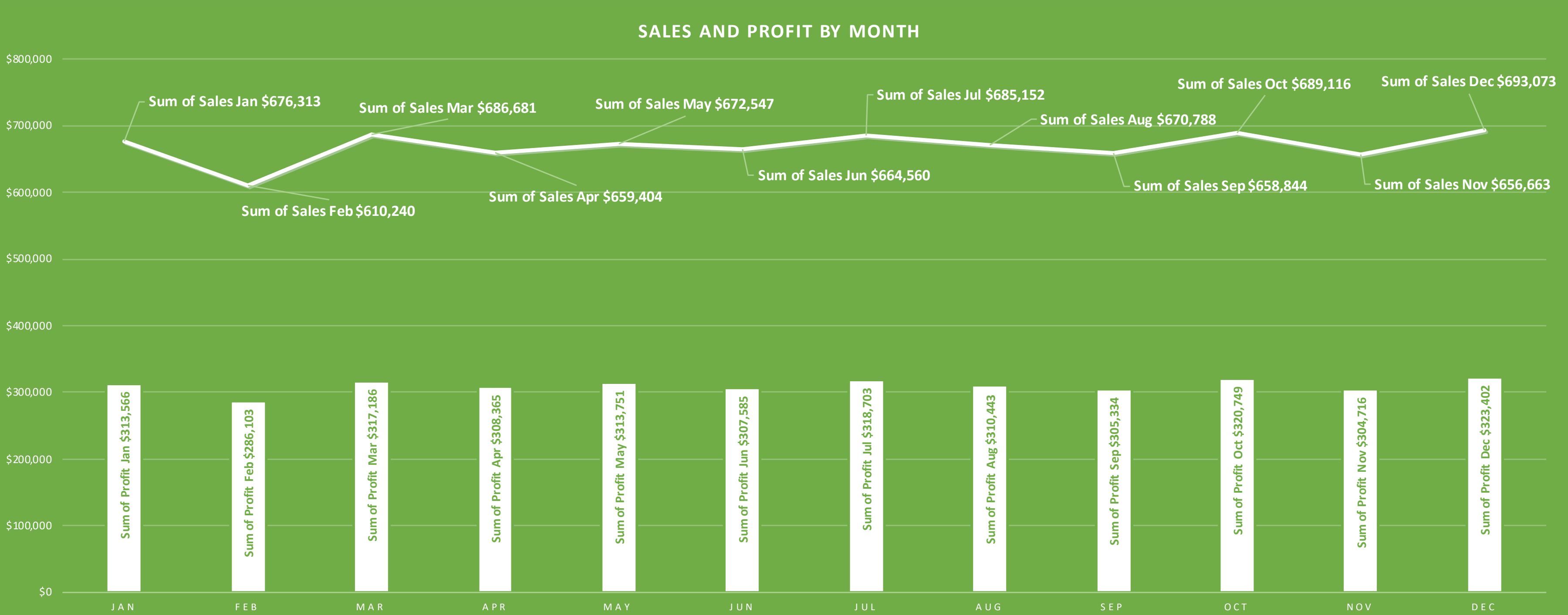


Richard Pang

Business Analyst - Data Scientist - UX designer

Areas of Expertise

- SQL Query Development
- Python Data Analysis
- Tableau Reporting Skills
- Business Intelligence Analytics
- Data Mining Techniques
- Market Trend Analysis
- Data Warehousing Management
- Team Leadership
- Figma
- Mural
- Marvel
- Adobe Substance painter
- Adobe Photoshop
- Blender
- Autodesk Maya
- Foundry Mari



Monthly sales and profit figures.

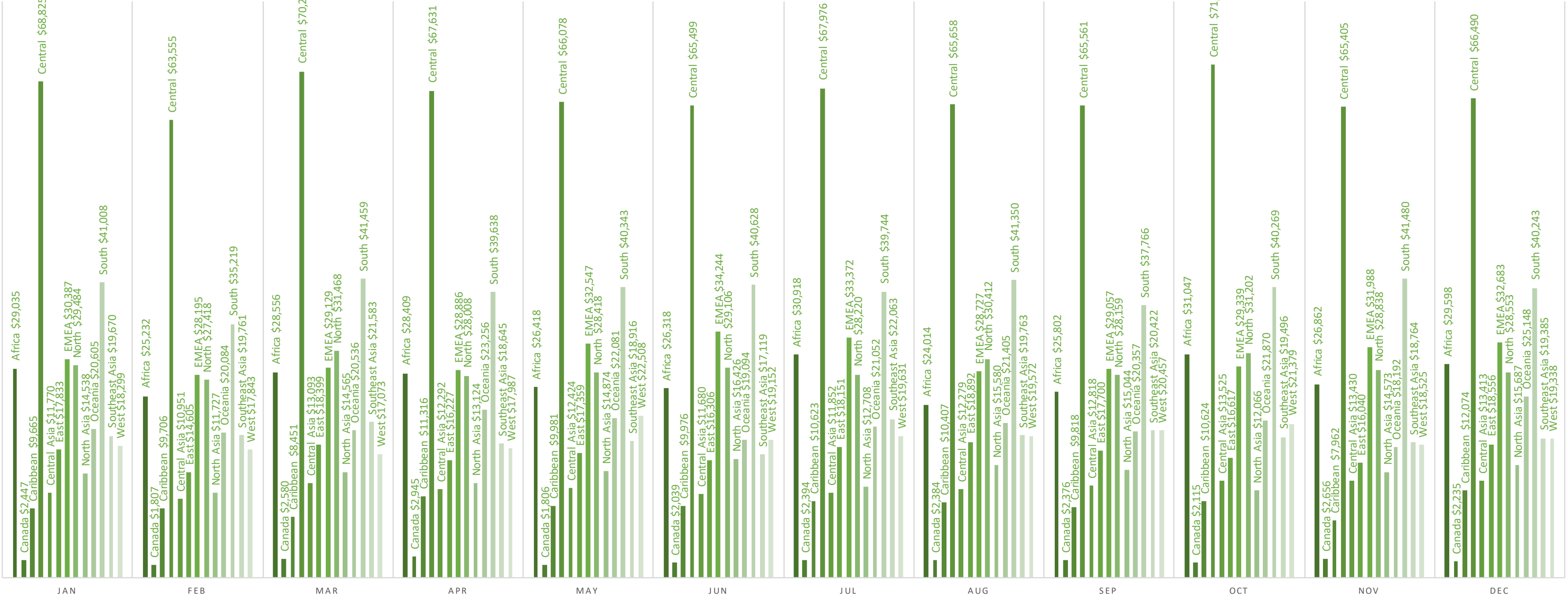
- As shown, December has the highest profit and sales.
- February shows the lowest profit and sales.



The Average sales for each product per region

- This indicates that Apple laptops and umbrellas have the highest sales across regions.
- This indicates that keyboards have the lowest sales across regions.

TABLE SHOWING THE PROFIT BROKEN DOWN BY MONTH



Profit by month and region.

- As shown, Central achieved the highest profit in October, totaling \$71,200.
- In May, Canada reported the lowest profit, amounting to \$1,805.
- We should consider focusing more on improving Canada's profit in the coming year.

Mean Sales
\$15,919

Median Sales
\$8,835

Mean Profit
\$7,401

Median Profit
\$2,901

The mean and median values for sales and profit.

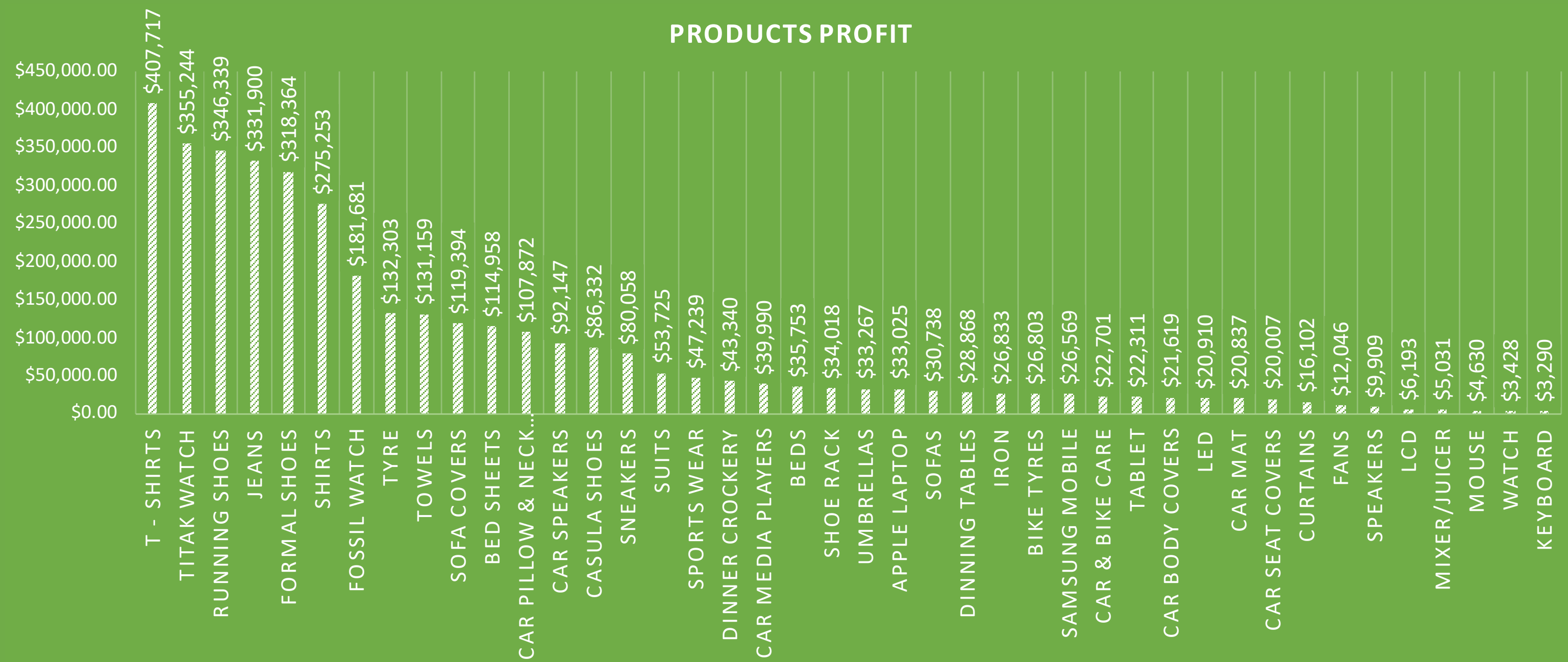
- This shows that the mean sales amount is \$15,919, while the median is \$8,835.
- This indicates that the mean profit is \$7,401, while the median profit is \$2,901.

Top 3 highest performing products		
1	2	3
T - Shirts	Titak watch	Running Shoes

Bottom 3 lowest performing products		
3	2	1
Mouse	Watch	Keyboard

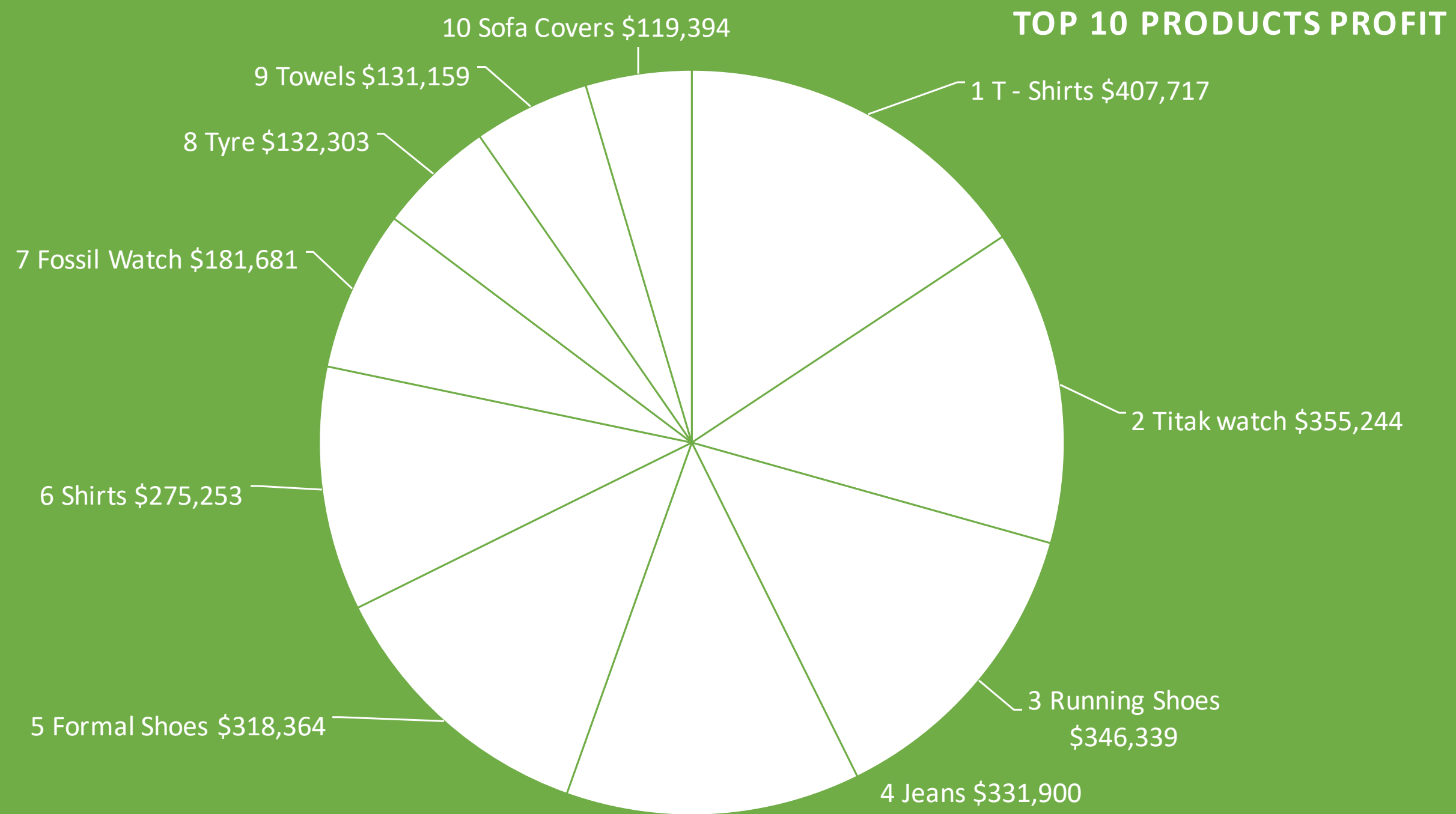
The top three and bottom three products by profit.

- This reveals that T-shirts are the top-performing product in terms of profit.
- Keyboards have the lowest profit among products.



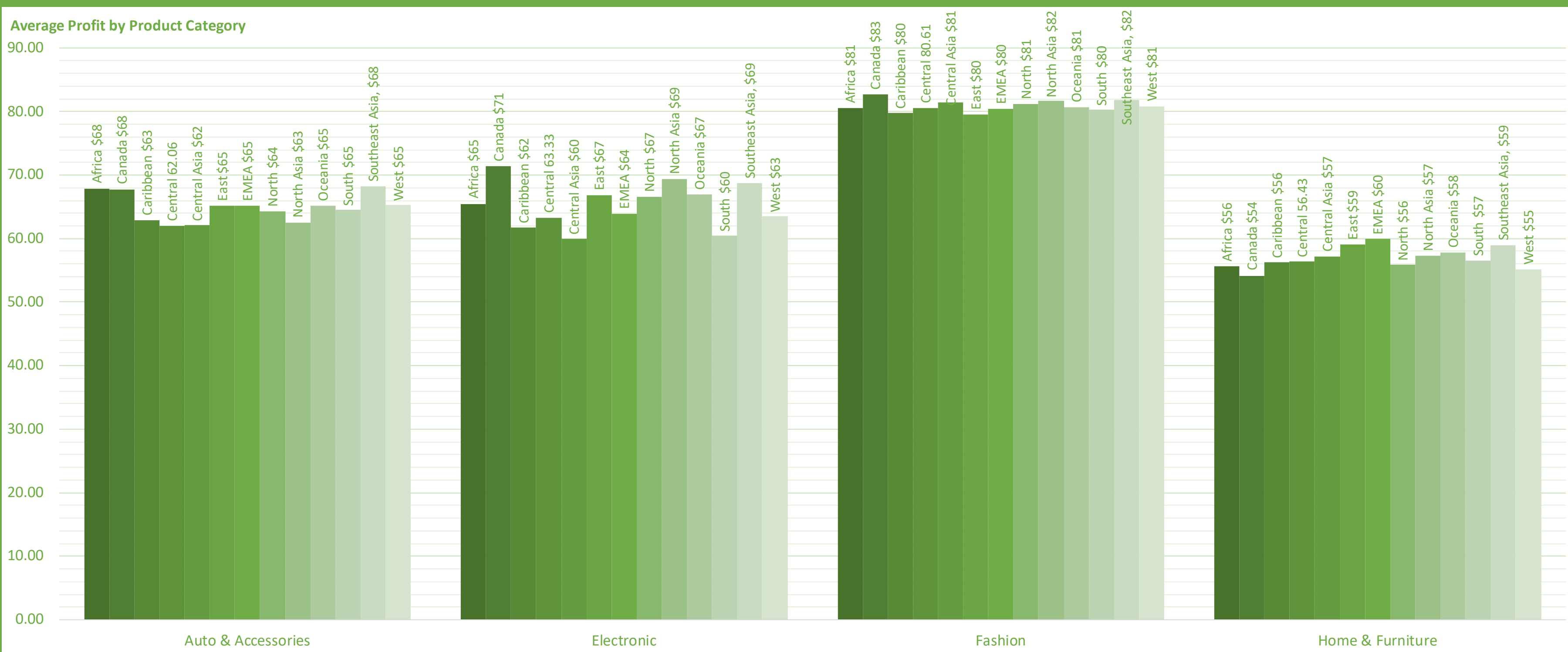
Total Profit per Product

- The product profit chart displays trends in product profitability.
- It shows profit data for top-selling items.
- The Bar chart covers the year 2015, highlighting the product with the highest profit margin.



Total Profit of the Top 10 Products

- The pie chart displays the top 10 highest-grossing products by profitability.
- T-shirts are identified as having the highest profit margin.
- The data focuses on the year 2015, emphasizing the top 10 products with the greatest profit margin.



Average Profit by Product Category by Region

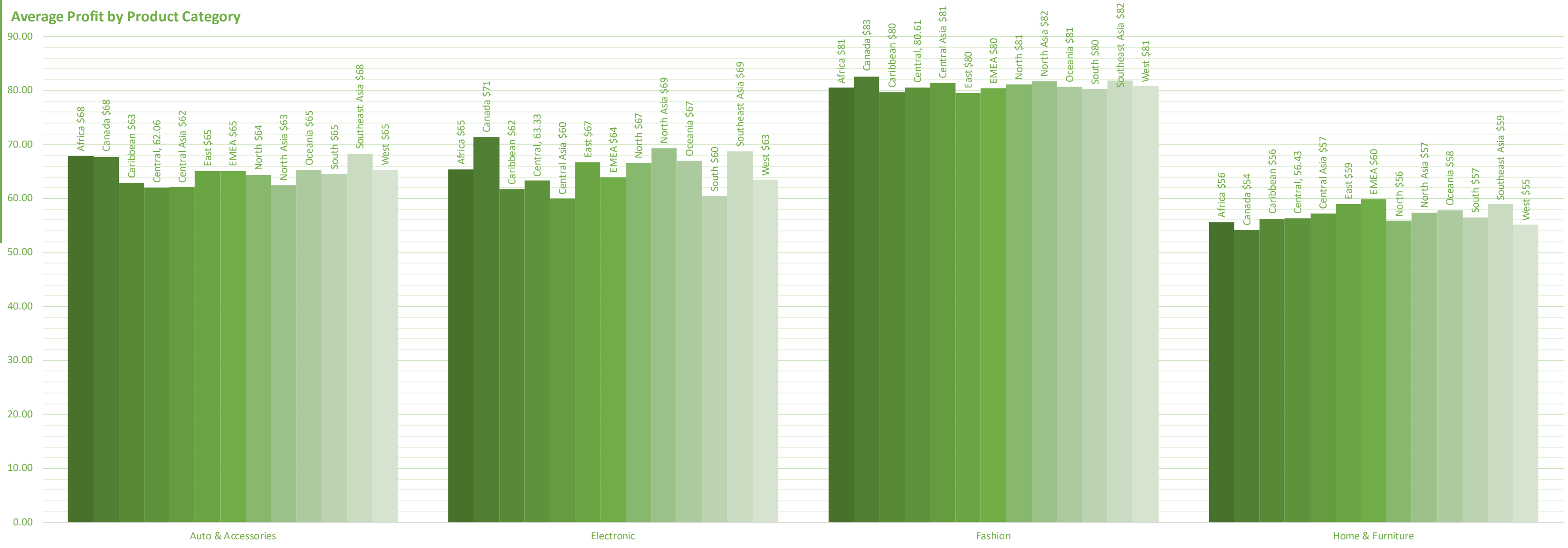
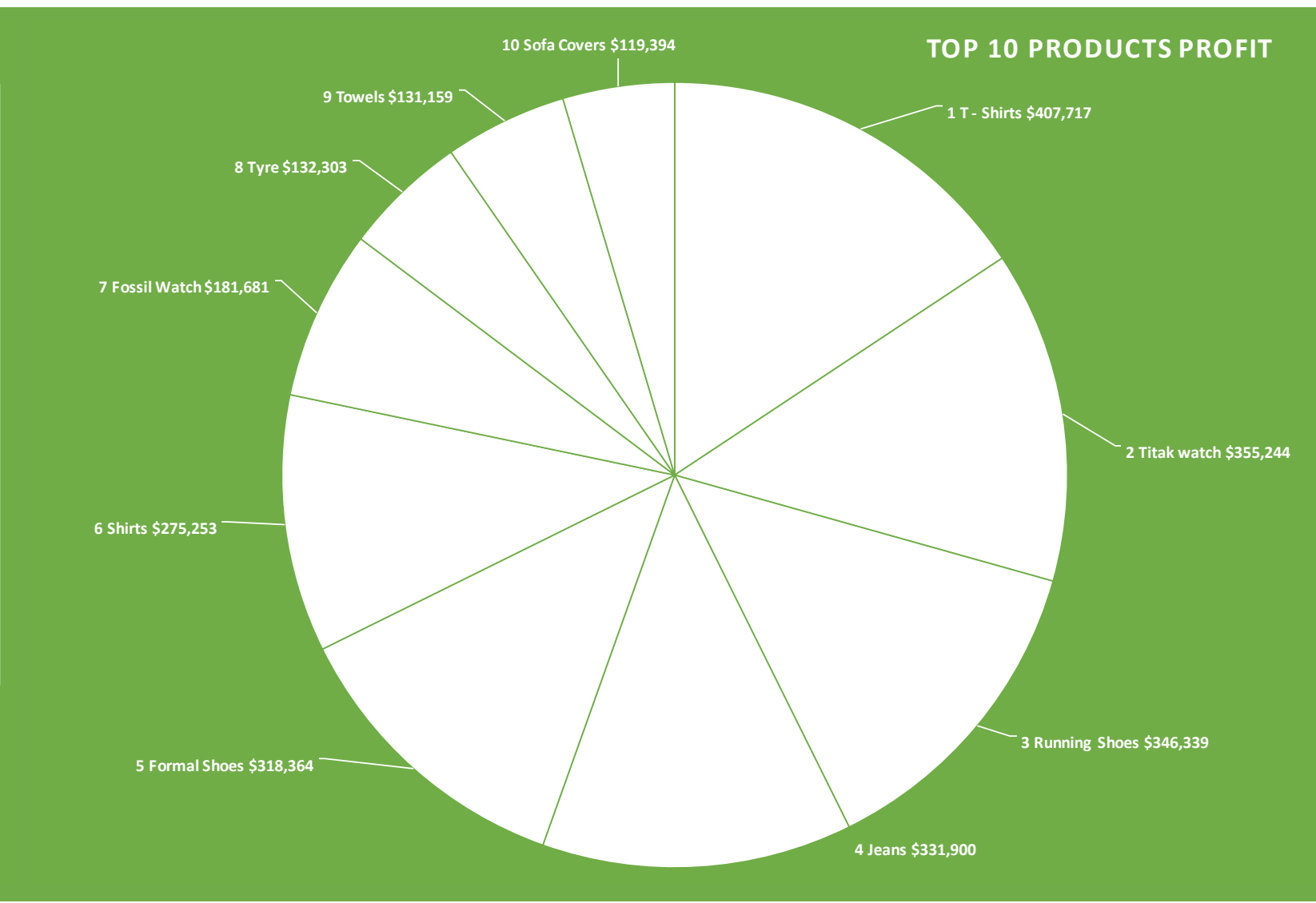
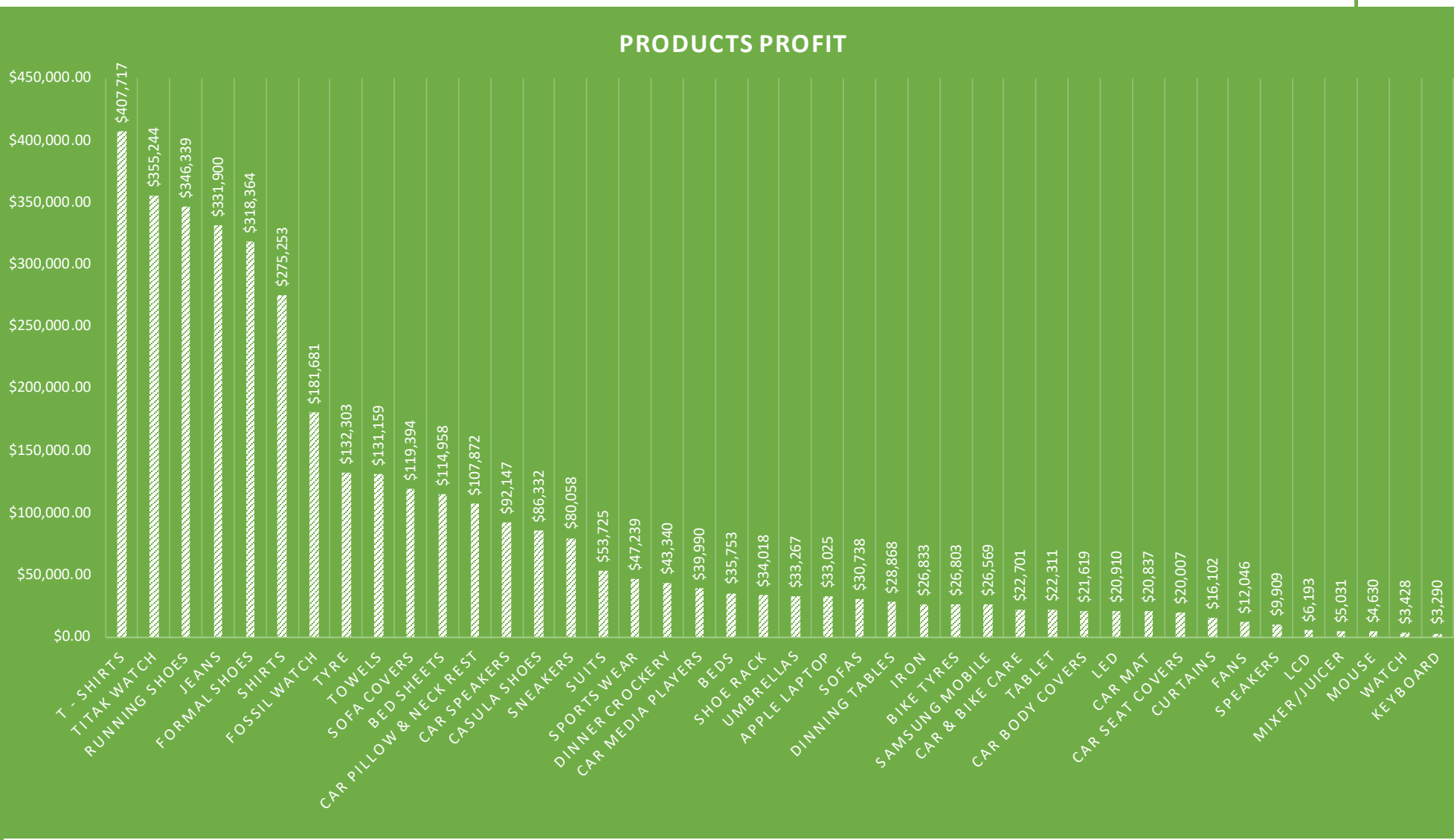
- The bar chart shows the average profit for each product category by region.
- It identifies which regions have higher average profits across different product categories.

Sales & profit Trends Dashboard

This case study analyzes monthly product profits across different regions, highlighting which months and regions generate the highest sales and profit. It provides insights into peak sales and profit periods and regional performance trends.

Top 3 highest performing products		
1 T - Shirts	2 Titak watch	3 Running Shoes

Bottom 3 lowest performing products		
3 Mouse	2 Watch	1 Keyboard



Sales & profit Trends Dashboard

This case study analyzes monthly product profits across different regions, highlighting which months and regions generate the highest sales and profit. It provides insights into peak sales and profit periods and regional performance trends.

The mean and median sales figures

Mean Sales \$15,919

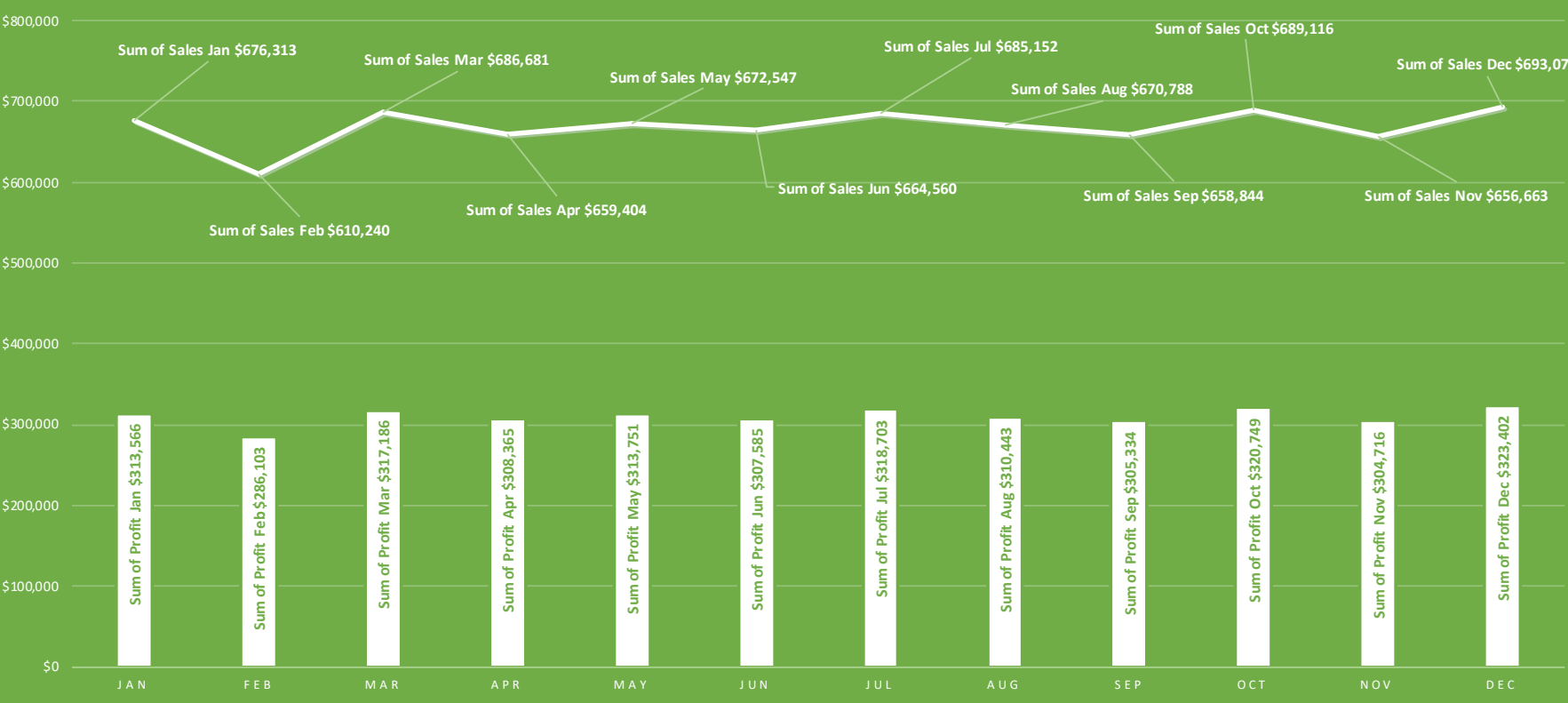
Median Sales \$8,835

The mean and median profit figures

Mean Profit \$7,401

Median Profit \$2,901

SALES AND PROFIT BY MONTH



AVERAGE SALES FOR EACH PRODUCT

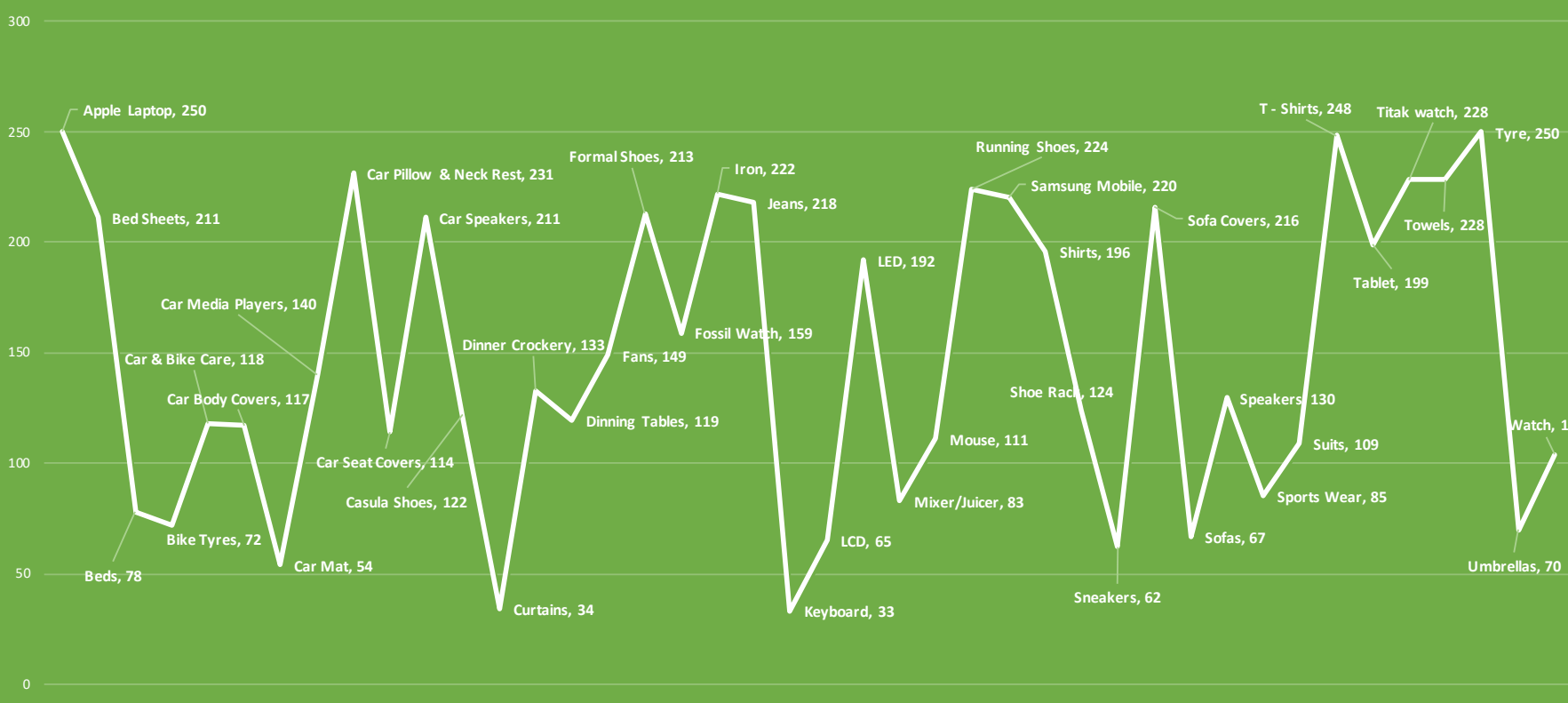
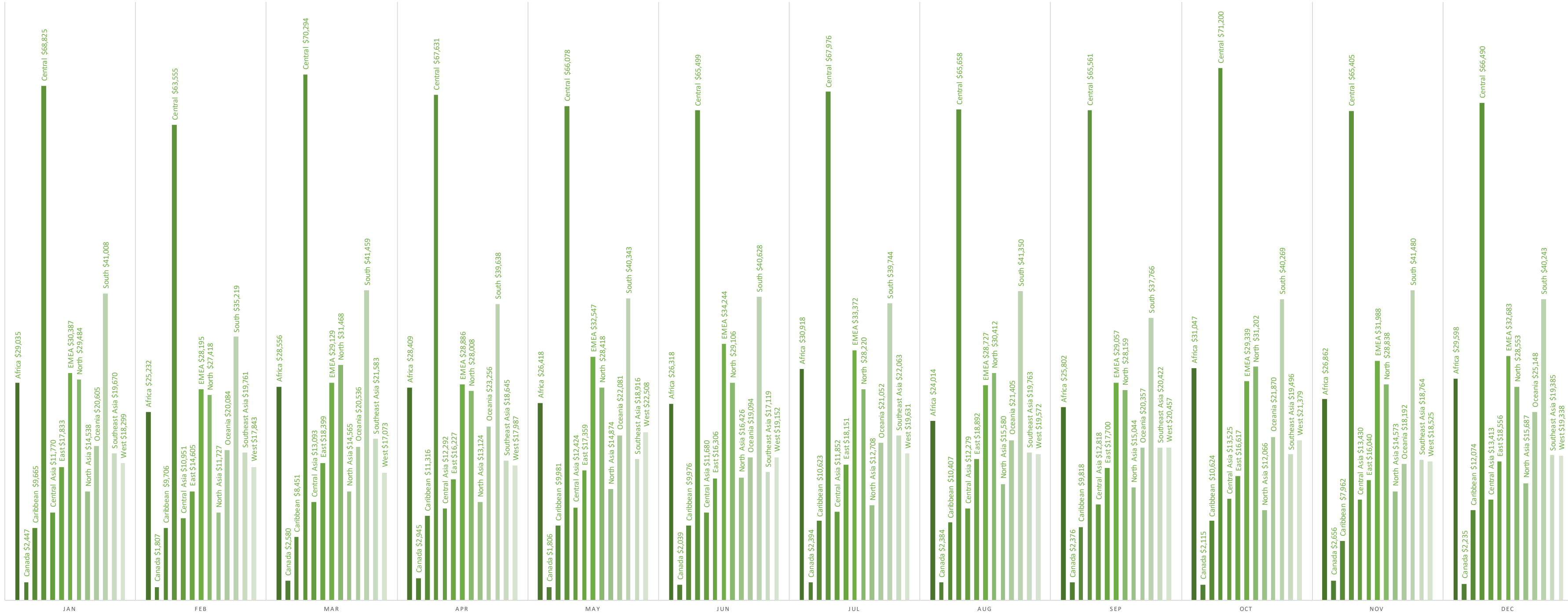


TABLE SHOWING THE PROFIT BROKEN DOWN BY MONTH



Conculsions

- Prices for most items, including high-value products like laptops and tyres, are consistent across regions, indicating global price standardization.
- Curtains are the lowest-priced item at \$34, while higher-priced items like sofa covers are consistently priced at \$216.
- Some products, like the keyboard in Canada, have missing price data, but most items show consistent pricing.
- The grand total profit is \$3,729,902.95, with top-performing products like jeans, formal shoes, and t-shirts driving profitability.
- Central region is the highest-performing, with \$804,172.61 in profit, while Canada has the lowest at \$27,782.31.
- January, March, and October are peak months for profits, with March being the highest.
- The Central region consistently leads, while Canada underperforms. Overall, profits remain stable throughout the year.