

Comprehensive Data Analysis Report
Detailed Insights and Findings from Excel Analysis

By Benjamin Wisdom Laanke

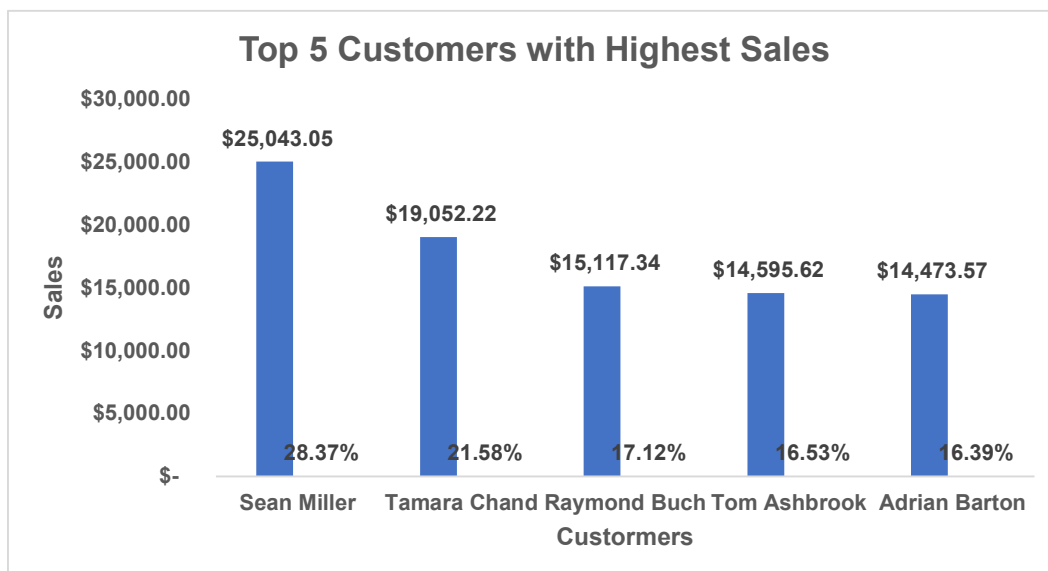
Customer Analysis:

1. How has the overall sales and profit evolved over the years? Are there any noticeable trends or patterns?

Top 5 Customers with Highest Sales

Customer Name	Total Sales	% of Grand Total
Sean Miller	\$ 25,043.05	28.37%
Tamara Chand	\$ 19,052.22	21.58%
Raymond Buch	\$ 15,117.34	17.12%
Tom Ashbrook	\$ 14,595.62	16.53%
Adrian Barton	\$ 14,473.57	16.39%
Grand Total	\$ 88,281.80	100.00%

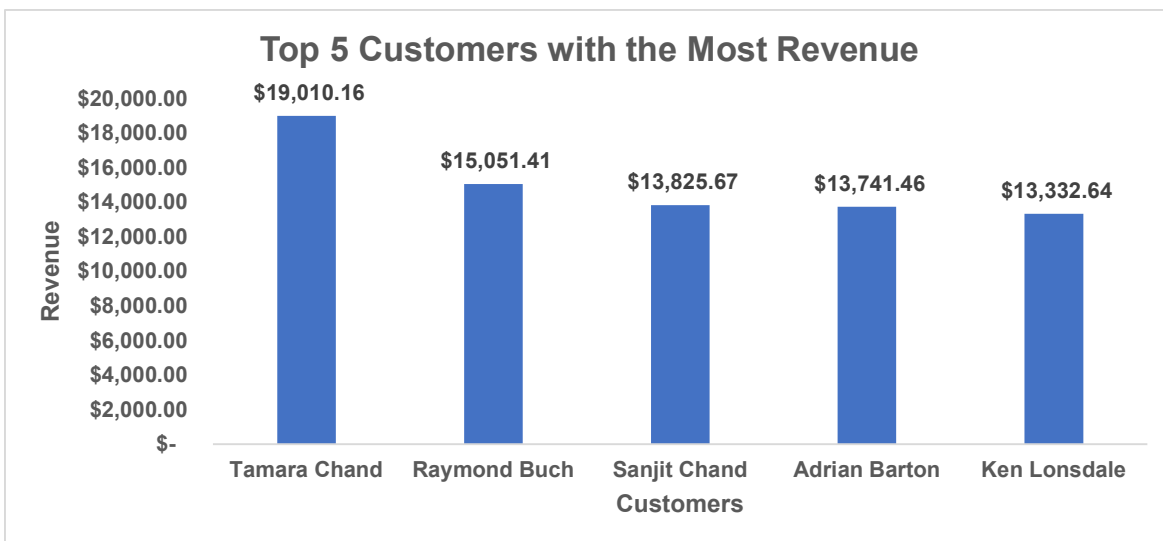
The Customer with the Highest total Sales is Sean Miller with \$25043.05 in Sales. This makes him a key revenue generator, significantly ahead of the others.



2. Who are the Top 5 Customers with the most revenue generated for the company?

Customer Name	Total Revenue
Tamara Chand	\$ 19,010.16
Raymond Buch	\$ 15,051.41
Sanjit Chand	\$ 13,825.67
Adrian Barton	\$ 13,741.46
Ken Lonsdale	\$ 13,332.64
Grand Total	\$ 74,961.34

The Customer who generated the most revenue is Tamara Chand with \$19,010.16. This shows that while she may not have the highest sales volume (as seen in the earlier sales chart), she buys with lower discounts or higher-margin products, resulting in better net revenue.

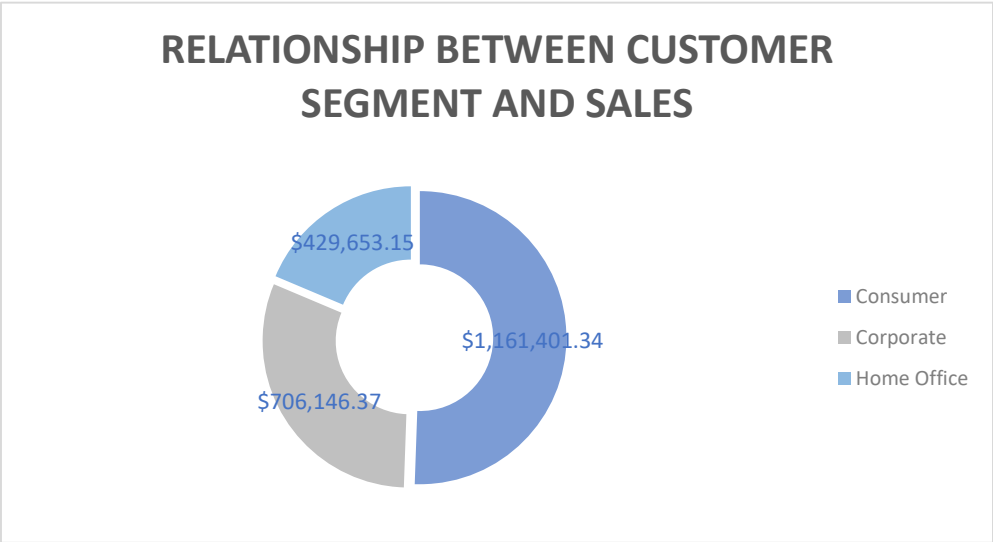


3. How does the distribution of customer segments (like Corporate, Home Office, and Consumer) impact total sales?

Relationship Between Customer Segment And Sales

Segment	Total Sales
Consumer	\$ 1,161,401.34
Corporate	\$ 706,146.37
Home Office	\$ 429,653.15
Grand Total	\$ 2,297,200.86

The Consumer segment generates the highest sales, contributing over 50% of the total. This indicates that individual buyers or households are your primary revenue stream.

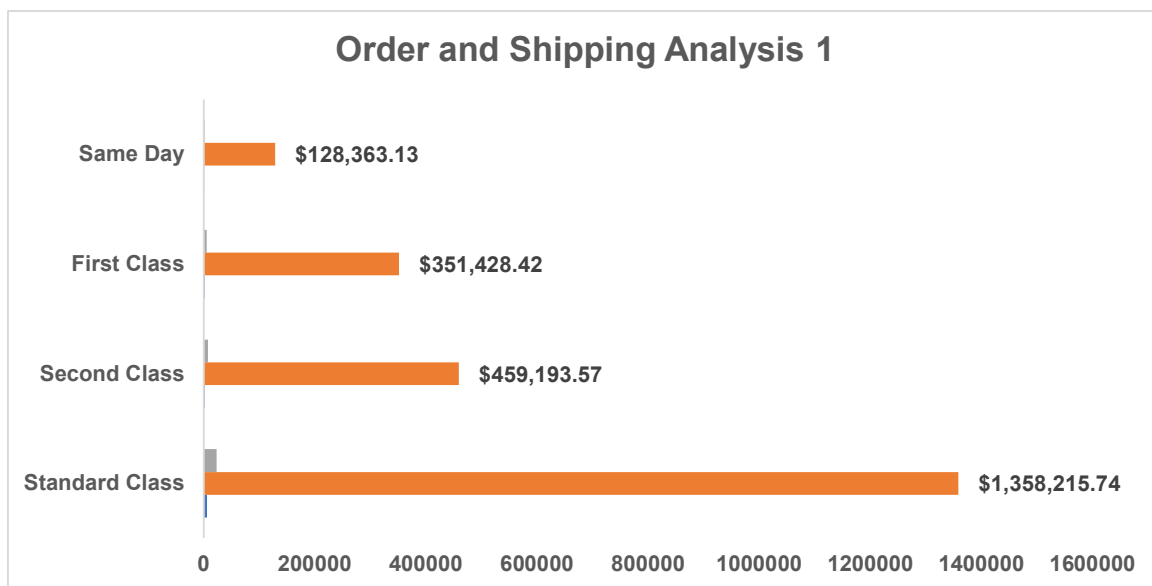


2.Order and Shipping Analysis:

1. What is the most common shipping mode used, and does it correlate with the order quantity or sales amount?

Ship Mode	Count of Order ID	Total Sales	Total Quantity
Standard Class	5968	\$ 1,358,215.74	22797
Second Class	1945	\$ 459,193.57	7423
First Class	1538	\$ 351,428.42	5693
Same Day	543	\$ 128,363.13	1960
Grand Total	9994	\$ 2,297,200.86	37873

The "Standard Class" shipping mode is the most common by a significant margin in terms of both order quantity and total sales. There is a strong positive correlation between the frequency of use of a shipping mode and the sales amount generated through it; the more a shipping mode is utilized, the higher the sales associated with it. This implies that customers are more likely to use products requiring Standard Class shipping contribute the most to the overall revenue.



2. Is there any significant difference in shipping durations (measured by the time between order and ship dates) across different regions?

Region	Avg of Ship Duration
Central	4.06
South	3.96
West	3.93
East	3.91
Grand Total	3.96

The pivot chart indicates that there is **no significant difference** in shipping durations across the different regions (East, West, South, Central). While minor variations exist, the average time taken to ship orders is remarkably consistent, suggesting that the company's shipping logistics and processes are uniform and efficient across its U.S. operations regardless of the geographical region.



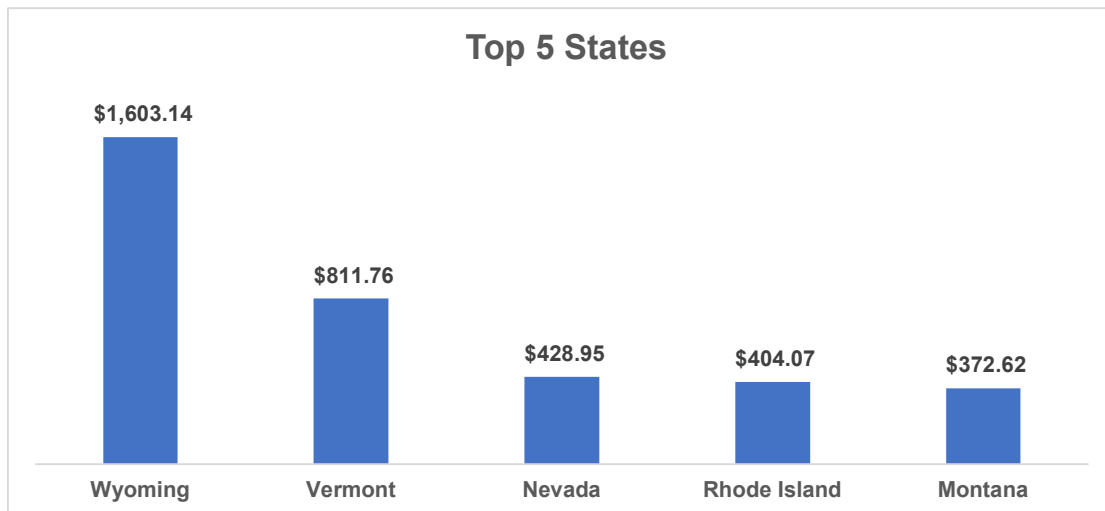
Geographical Analysis:

1. How has the overall sales and profit evolved over the years? Are there any noticeable trends or patterns?

Top 5 States

State	Average of Sales
Wyoming	\$ 1,603.14
Vermont	\$ 811.76
Nevada	\$ 428.95
Rhode Island	\$ 404.07
Montana	\$ 372.62
Grand Total	\$ 454.75

The top 5 states with the highest *average* sales are Wyoming, Vermont, Nevada, Rhode Island, and Montana. The primary insight from this list, especially considering that these are average sales and not total sales, is that these states may be characterized by customers making fewer but higher-value purchases, or by specific industries/demographics that drive larger individual transactions, rather than by sheer volume of sales or large populations.

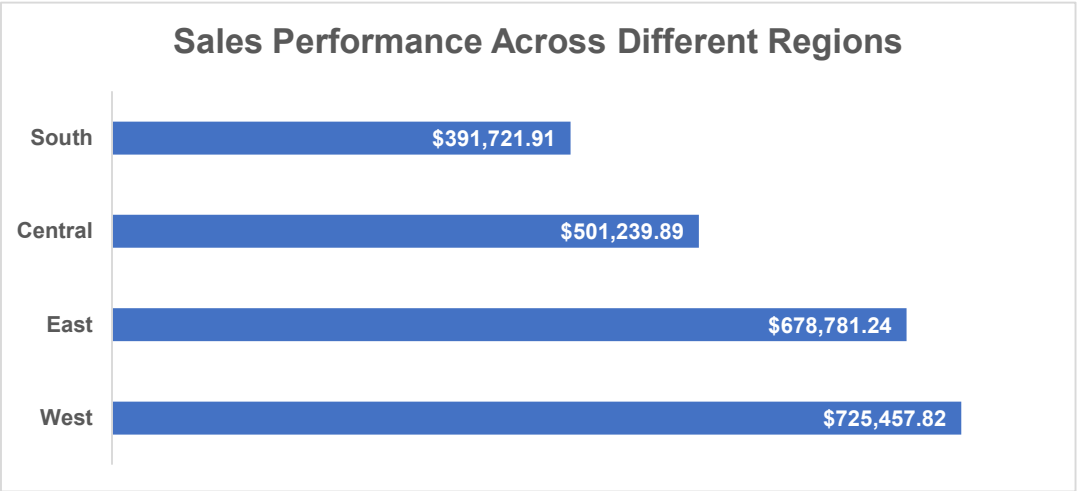


2. Analyze the sales performance across different regions. Are there regions where sales are consistently higher or lower?

Sales Performance Across Different Regions

Row Labels	Total Sales
West	\$ 725,457.82
East	\$ 678,781.24
Central	\$ 501,239.89
South	\$ 391,721.91
Grand Total	\$ 2,297,200.86

The sales performance across different regions is not uniform. The West and East regions are the top performers, generating the majority of sales, while the South region is consistently the lowest-performing in terms of total sales. This suggests that marketing efforts, resource allocation, or inventory management might need to be adjusted based on these regional disparities in sales volume.

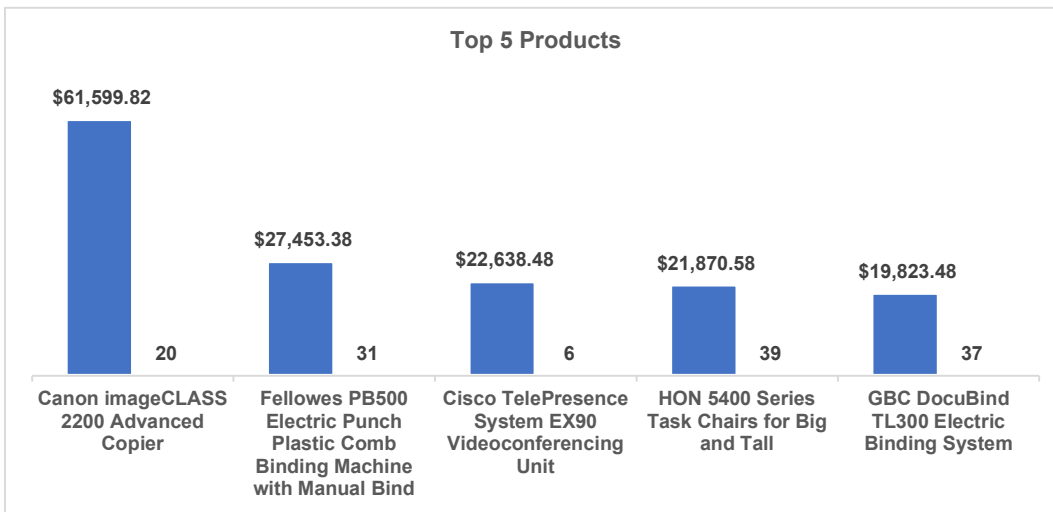


Product Analysis:

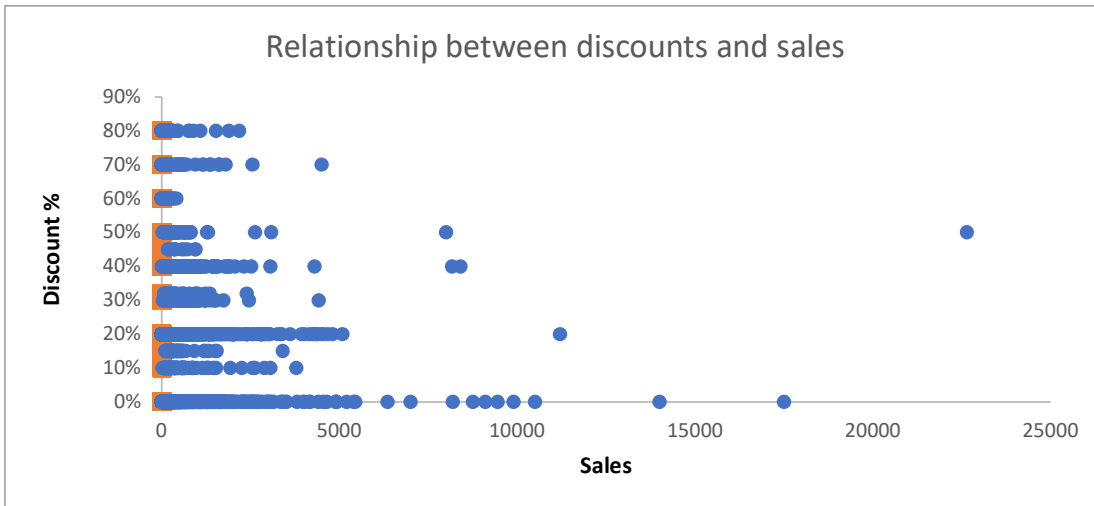
1. What are the top 5 selling products in terms of quantity and sales? Are there any seasonal patterns in their sales?

Product Name	Total Sales	Sum of Quantity
Canon imageCLASS 2200 Advæ	\$ 61,599.82	20
Fellowes PB500 Electric Punch	\$ 27,453.38	31
Cisco TelePresence System EX	\$ 22,638.48	6
HON 5400 Series Task Chairs f	\$ 21,870.58	39
GBC DocuBind TL300 Electric E	\$ 19,823.48	37
Grand Total	\$ 153,385.74	133

The table clearly identifies the top 5 products by both sales and quantity, highlighting that high-value products (like Canon imageCLASS 2200 Advanced Copier) can dominate sales despite lower unitvolumes, while other products contribute through higher quantities at lower price points.



2. Investigate the relationship between discounts and sales. Do products with higher discounts tend to have higher or lower sales?



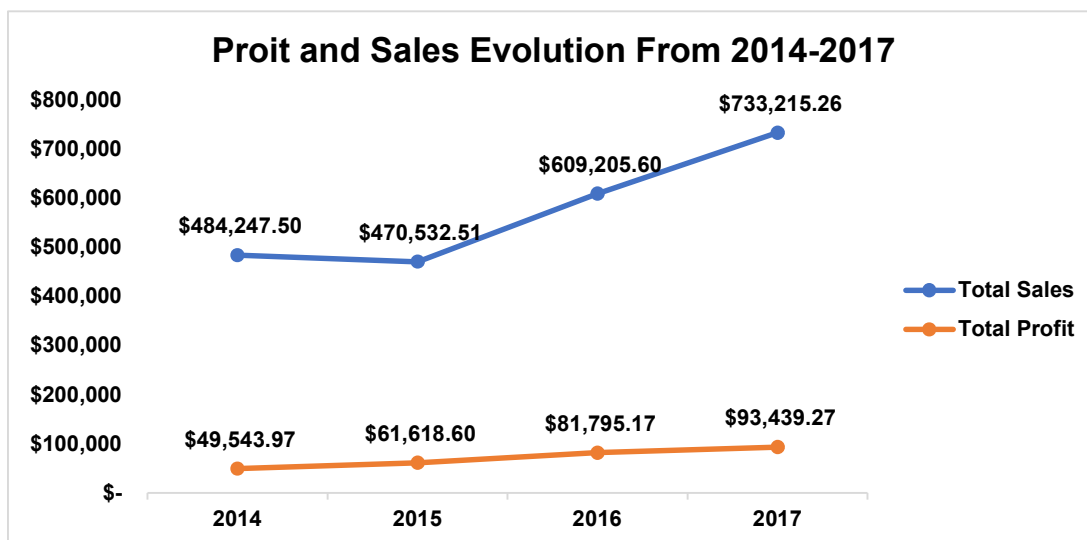
Based on this scatter chart, it appears that products with **higher discounts tend to have** lower sales amounts for individual transactions. The bulk of high-value sales transactions occur when discounts are minimal (0-20%). While higher discounts might be used to move less popular or lower-priced items, they do not appear to be correlated with generating high sales values in this dataset. This suggests that deep discounts might be used to clear inventory rather than drive significant revenue growth from high-value products.

5. Time Series Analysis:

1. How has the overall sales and profit evolved over the years? Are there any noticeable trends or patterns?

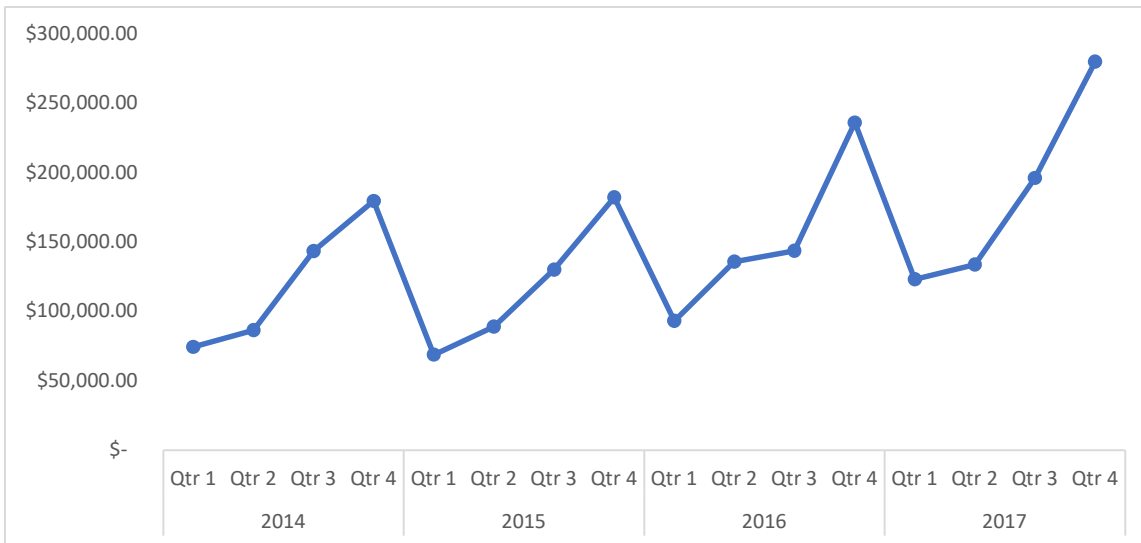
Order Year	Total Sales	Total Profit
2014	\$ 484,247.50	\$ 49,543.97
2015	\$ 470,532.51	\$ 61,618.60
2016	\$ 609,205.60	\$ 81,795.17
2017	\$ 733,215.26	\$ 93,439.27
Grand Total	\$ 2,297,200.86	\$ 286,397.02

The U.S. branch of Kultra Superstore has demonstrated a very positive financial trajectory from 2014 to 2017. After a minor sales dip in 2015, both sales and profit have experienced consistent and significant year-over-year growth. This indicates a healthy and expanding business operation.



2. Using Line Chart, identify any seasonality in the data, such as monthly or quarterly variations in sales or profit.

Order Year	Total Sales
2014	\$ 484,247.50
Qtr 1	\$ 74,447.80
Qtr 2	\$ 86,538.76
Qtr 3	\$ 143,633.21
Qtr 4	\$ 179,627.73
2015	\$ 470,532.51
Qtr 1	\$ 68,851.74
Qtr 2	\$ 89,124.19
Qtr 3	\$ 130,259.58
Qtr 4	\$ 182,297.01
2016	\$ 609,205.60
Qtr 1	\$ 93,237.18
Qtr 2	\$ 136,082.30
Qtr 3	\$ 143,787.36
Qtr 4	\$ 236,098.75
2017	\$ 733,215.26
Qtr 1	\$ 123,144.86
Qtr 2	\$ 133,764.37
Qtr 3	\$ 196,251.96
Qtr 4	\$ 280,054.07
Grand Total	\$ 2,297,200.86



The data exhibits strong quarterly seasonality, with sales consistently peaking in Qtr4 and generally experiencing lower performance during Qtr2 and Qtr3. This seasonal pattern has been consistent from 2014 to 2017, and the overall sales volume during these peak periods has also been increasing year over year.

Insights and Recommendations for Kultra Superstore's Canadian

1. How has the overall sales and profit evolved over the years? Are there any noticeable trends or patterns?

1. Insight from Working on the Dataset:

Working with the U.S. Superstore dataset has provided several key insights into the operational and sales dynamics of the company's established U.S. branch:

Robust Overall Growth: The company demonstrates a strong and consistent upward trend in both sales and profit from 2014 to 2017. This indicates a healthy business model with growing market presence and profitability.

Significant Quarterly Seasonality: A pronounced seasonal pattern exists, with sales consistently peaking in Q4 (likely driven by holiday shopping) and dipping in Q2/Q3. This cyclical nature is a critical factor for planning.

Dominant Shipping Mode: "Standard Class" shipping is the most frequently used and accounts for the largest portion of sales, suggesting it's a reliable and preferred method for customers.

Consistent Shipping Efficiency: Shipping durations are remarkably consistent across all U.S. regions, with very minor variations. This speaks to a well-established and efficient logistics network.

Regional Performance Disparities: While overall growth is strong, sales performance varies significantly by region. The West and East are the highest-performing regions, while the South consistently lags. This highlights opportunities for targeted strategies.

High-Value vs. High-Volume Products: The analysis revealed a distinction between products that generate high sales revenue due to high individual value (e.g., Canon imageCLASS) versus those that contribute through high quantities at lower price points (e.g., HON 5400 Series Task).

Discounting Strategy Nuances: Deeper discounts (above 20%) tend to be associated with lower-value individual sales transactions, while the highest sales volumes are achieved at lower discount rates. This suggests that discounts are not the primary driver of high-value sales, and may be used for inventory clearance rather than boosting top-line revenue from premium items.

2. Recommendations for the New Canadian Branch:

Leveraging the insights from the U.S. branch's performance, here are recommendations for the new Canadian branch to optimize its operations and achieve the best results:

1. Strategic Inventory Management & Staffing based on Seasonality:

Implement a robust inventory management system that anticipates the strong Qtr4

sales surge. Stock up on popular products well in advance of Q4, and consider scaling down inventory slightly in Q2/Q3 to optimize holding costs.

2. Prioritize "Standard Class" Shipping and Explore Local Partnerships:

Given its dominance and correlation with high sales in the U.S., make "Standard Class" the primary and most cost-effective shipping option for the Canadian branch. Focus on establishing efficient local logistics partnerships to support this.

3. Segment-Specific Marketing and Product Bundling:

Proactively analyze Canadian customer segments (Corporate, Home Office, Consumer) upon launch to understand their specific needs and purchasing behaviors, even before significant sales data accumulates. Develop tailored marketing campaigns and product bundles for each segment from the outset.

4. Data-Driven Regional Expansion (within Canada):

Once initial sales data becomes available for Canadian regions, use the U.S. experience (where West and East were top performers) to inform future expansion or resource allocation within Canada. Identify potential high-performing regions early and focus marketing/infrastructure investments there.

5. Strategic Discounting for Profit Maximization:

Exercise caution with deep discounts (above 20%). Use them strategically for clearing slow-moving inventory or as short-term promotional tools for specific lower-value items, rather than as a primary driver for high-value product sales. Focus on value proposition and customer service for high-margin items.