

US REGIONAL SALES DATA ANALYSIS:

**BUSINNESS PERFORMANCE, TRENDS AND INSIGHTS
USING SQL**



BY

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INTRODUCTION

- This project analyzes the US Regional Sales Data Using SQL queries.
- The dataset includes Sales Order sheet which contains about 7991 orders, sales channels, warehouses, order & delivery date, order quantity, unit cost and selling price with discounts added for different customers; Customers Sheet which contains all the 50 customers that shopped during the period the data was gathered; Store Location & Region sheet which contains the states and county for all 367 stores, population and median income of each store county and their regions; Products Sheet which contain all 47 products being sold; and Sales Team Sheet which contains all 28 sales team that worked during the period.
- The goal is to derive actionable insights on sales performance, customer behavior and profitability.

OBJECTIVES/GOALS

1. Evaluate Sales Performance and Profitability
2. Analyze Regional Analysis
3. Analyze Customer Insights
4. Assess Sales Team Performance
5. Explore Time Based Analysis

SALES PERFORMANCE AND PROFITABILITY

- TOTAL REVENUE, PROFIT AND COST ACROSS TIME

Sales performance across time (Year Focus), revenue increased each year doing better than the last same goes for the profits.

| YEAR | TOTAL_COST | TOTAL_REVENUE | TOTAL_PROFIT |
|------|--------------|---------------|--------------|
| 2018 | \$12,155,383 | \$17,102,633 | \$4,947,250 |
| 2019 | \$19,673,726 | \$27,854,296 | \$8,180,570 |
| 2020 | \$19,988,960 | \$28,186,451 | \$8,197,491 |

- TOP PRODUCTS BY REVENUE AND PROFIT

The top performing products with most **revenue** & **profits** among others are: 1.

Accessories(\$2,101,202 & \$651,232); 2. **Photo frames**(\$1,775,222 & \$553,184); 3. **Bathroom furniture**(\$1,804,942 & \$544,590); 4. **Cocktail glasses**(\$1,720,609 & \$539,751); 5. **Table linens**(\$1,765,170 & \$524,644), 6. **stemware**(\$1,674,013 & \$523,707), 7. **collectibles**(\$1,809,669 & \$521,029).

- BEST PERFORMING SALES CHANNELS

The highest performing sales channel is the walk-in-store

| Sales Channel | TOTAL_REVENUE | TOTAL_PROFIT |
|---------------|---------------|--------------|
| In-Store | \$30,102,905 | \$8,797,853 |
| Online | \$21,698,559 | \$6,166,816 |
| Distributor | \$13,169,148 | \$3,887,897 |
| Wholesale | \$8,172,769 | \$2,472,745 |

REGIONAL ANALYSIS

- REVENUE DISTRIBUTION BY REGION

The west and south region did better than other regions in terms of **revenue** & orders recorded as follows; west (\$25,713,559 & 2,784), south (\$23,474,342 & 2,572), midwest (\$15,483,007 & 1,665), northeast (\$8,472,470 & 970).

- TOP STATES AND CITIES BY REVENUE

The top Performing states (cities; **revenue**) are: 1. Indiana (Wayne; \$441,792), 2. Oklahoma (**Broken Arrow**; \$435,626), 3. California (**Costa mesa**; \$398,257), 4. North Dakota (**Fargo**; \$366,587), 5. Illinois (**Naperville**; \$350,985), 6. California (**Escondido**; \$345,230), 7. Utah (**West Jordan**; \$344,516), 8. Colorado (**pueblo**; \$337,707), 9. Tennessee (**Knoxville**; \$337,428), 10. Florida (**Hollywood**, \$329,663).

- CORRELATION BETWEEN POPULATION, INCOME, AND SALES

The population and household income of cities didn't particularly affect sales directly. According to the data provided **New york city** had highest population of **8,550,405** with a total revenue of \$105,327.02. While **Broken arrow city** had the highest revenue of \$435,626.30 with a population of **106,563**.

Also, **New york city** had highest household income \$3,113,535 with a total revenue of \$105,327.02. While **Broken arrow city** had the highest revenue of \$435,626.30 with household income of \$37,246.

CUSTOMER INSIGHTS

- TOP CUSTOMERS BY REVENUE

Best performing customers based on revenue generated among others are; **1. Medline** (\$2,012,877), **2. Apotheca ltd** (\$1,841,005), **3. Pure group** (\$1,770,662.26), **4. OUR ltd** (\$1,712,640), **5. Trigen** (\$1,693,782), **6. Ole group** (\$1,673,218) **7. Apollo ltd** (\$1,658,925).

- MOST FREQUENT BUYERS AND ORDER QUANTITY

Best performing customers based on frequency are; **1. Medline** (210), **2. Eminence corp** (186), **3. Elorac corp** (181), **4. Apotheca ltd** (179) **5. Apollo ltd** (178), **6. OUR ltd** (176), **7. Victory ltd** (176).

Best performing customers based on total quantity of orders: **1. Medline** (970), **2. Elorac corp** (880), **3. Apotheca ltd** (828), **4. OHTA'S corp** (819), **5. Ei** (818), **6. Victory ltd** (812), **7. Apollo ltd** (805).

- AVERAGE ORDER SIZE AND DISCOUNTS PER CUSTOMER

Among others **Trigen** (\$10,858); **Apotheca** (\$10,285); **3LAB ltd** (\$10,176), **Pure group** (\$10,118), had the highest average order value with average discount **11%, 12%, 11%, 11%, respectively**. While **Winthrop, Ascend ltd, OHTA'S corp, Burt's corp** had the highest discounts **13%** each with a significantly low average order value compared to others; **\$8,570, \$8,282, \$9,224, \$8,282** respectively.

SALES TEAM PERFORMANCE

- SALES TEAMS WITH HIGHEST REVENUE

Best performing sales team (revenue) among others are: 1. **Donald reynolds** (\$2,980,413), 2. **George lewis** (\$2,857,257), 3. **Joshua little** (\$2,846,864), 4. **Adam hernandez** (\$2,825,689), 5. **Todd roberts** (\$2,819,401).

- REGION WITH THE STRONGEST SALES TEAMS

The region with the best performing sales team is the **Midwest** sales team with a revenue of \$21,276,901, coming close second is the **West** region sales team with a revenue of \$18,198,447.

TIME-BASED ANALYSIS

- MONTHLY / QUARTERLY SALES TRENDS

Sales pick up significantly in the 3rd quarter and peak in the 4th quarter before dropping again when the 1st quarter of the new year begins.

- SEASONAL PEAKS IN SALES (E.G., HOLIDAY SURGES)

Sales peak during the summer / Christmas holidays.

- AVERAGE DELIVERY TIMES

The average delivery time for orders is 21days.

RECOMMENDATIONS

- From the data provided more investment guarantees more revenue and profits.
- Increased focus on high revenue returning products and channels.
- Implement loyalty for top patronizing customers and give more discounts or vouchers to highest purchasing customers.
- Reward the best performing sales team as a means of encouragement and replicate their methods.
- Expand into profitable regions with high income and increase the number of sales team in such region.
- Do more commercials during the holiday/Christmas period which is better performing period
- Provide better means of delivery to reduce delivery time and improve delivery.

