### Sales Data Sample Report

#### Introduction

This report analyzes a detailed sales dataset, focusing on ORDERNUMBER, QUANTITYORDERED, PRICEEACH, and SALES attributes. It aims to provide insights to guide sales strategies and enhance business performance, targeting sales managers, marketers, and executives. Key analyses include comparing Vintage cars and Classic cars sales, determining average sales, identifying top-selling products, assessing profit by country for specific product lines, comparing sales across years, and evaluating countries by deal size. The project's scope encompasses extracting insights to optimize sales strategies, product offerings, and overall business performance, catering to analysts and researchers interested in sales dynamics and market trends.

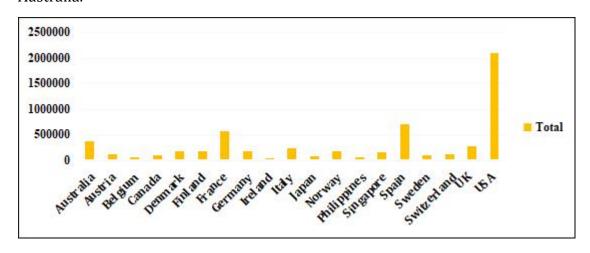
### Questionnaire

- 1. Comparison of sales between Vintage cars and Classic cars across all countries.
- 2. Determination of the average sales of all products and identification of the highest-selling product.
- 3. Assessment of the country yielding the most profit for Motorcycles, Trucks, and Buses.
- 4. Comparison of sales for all items across the years 2004 and 2005.
- 5. Comparative analysis of all countries based on deal size.

### **Analytics**

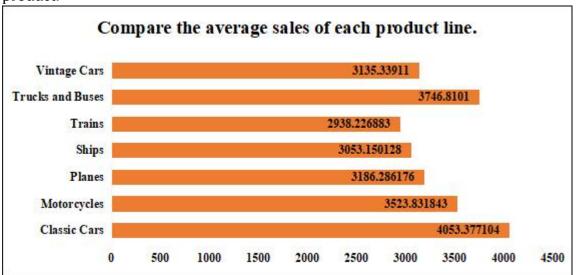
Q1. Comparison of sales between Vintage cars and Classic cars across all countries.

ANS: This analysis compares sales of Vintage cars and Classic cars across countries. USA leads with sales of \$2,102,394.02, followed by Spain, France, and Australia.

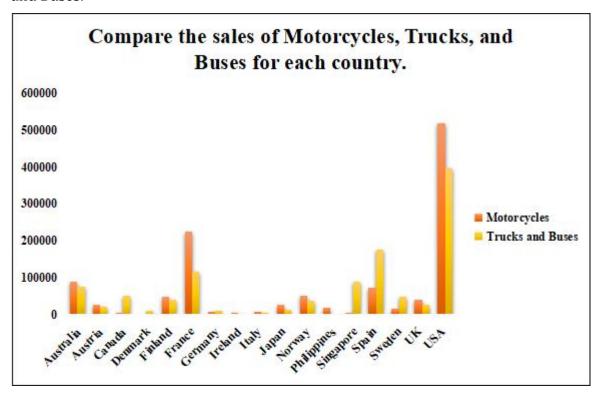


Q2. Determination of the average sales of all products and identification of the highest-selling product.

ANS: This analysis calculates the average sales of all products and identifies the highest-selling product. Classic Cars lead with an average sales of 4,053.377104, followed by Trucks, Buses, and Motorcycles. A graph visually depicts these findings, highlighting Classic Cars as the top-selling product.



Q3. Assessment of the country yielding the most profit for Motorcycles, Trucks, and Buses.



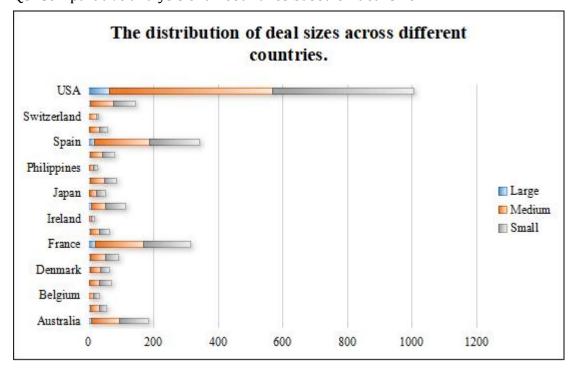
The analysis identifies the top-profitable country for Motorcycles, Trucks, and Buses. The USA leads in sales, followed by France and Spain.

#### Q4. Comparison of sales for all items across the years 2004 and 2005.

ANS: This analysis compares sales across all items in the years 2004 and 2005. The line chart illustrates dynamic shifts in sales over the years, with Classic cars consistently leading in both 2004 and 2005, totaling \$1,762,257.09 and \$672,573.28, respectively. The chart visually depicts sales fluctuations across categories, highlighting Classic cars' consistent dominance throughout the analyzed period.



Q5. Comparative analysis of all countries based on deal size.



ANS: The analysis investigates deal size distribution across countries. The bar chart reveals the USA's dominance, with significantly larger deal sizes compared to other countries: 64 large, 505 medium, and 435 small deals.

#### **Conclusion and Review**

The analysis delves deep into sales dynamics and profitability across categories and countries, revealing the USA as a prominent market leader. Strong sales performance in Vintage and Classic cars, Trucks, Buses, and Motorcycles underscores its dominance. Classic Cars emerge as the top-selling product, driving substantial revenue. The USA showcases exceptional profitability, especially in Trucks, Buses, and Motorcycles. Sales for Classic cars remain robust over the years 2004 and 2005, indicating sustained demand. Moreover, the USA exhibits significantly larger deal sizes, highlighting its sales volume dominance. While the report effectively visualizes key findings, exploring factors influencing sales fluctuations and deal size disparities could provide deeper insights. Overall, the analysis offers valuable insights for refining sales strategies and fostering business growth.

### Regression

| SUMMARY OUTPUT |           |  |  |  |  |  |  |
|----------------|-----------|--|--|--|--|--|--|
|                |           |  |  |  |  |  |  |
| Regression S   | tatistics |  |  |  |  |  |  |
|                | 0.877     |  |  |  |  |  |  |
| Multiple R     | 178       |  |  |  |  |  |  |
|                | 0.769     |  |  |  |  |  |  |
| R Square       | 441       |  |  |  |  |  |  |
| Adjusted R     | 0.766     |  |  |  |  |  |  |
| '              |           |  |  |  |  |  |  |
| Square         | 629       |  |  |  |  |  |  |
| Standard       | 896.6     |  |  |  |  |  |  |
| Error          | 688       |  |  |  |  |  |  |
|                | 000       |  |  |  |  |  |  |
| Observatio     |           |  |  |  |  |  |  |
| ns             | 250       |  |  |  |  |  |  |

### ANOVA

|            |         |          |        |       | Signific |       |        |         |
|------------|---------|----------|--------|-------|----------|-------|--------|---------|
|            | df      | SS       | MS     | F     | ance F   |       |        |         |
|            |         |          | 2.2E+  | 273.6 | 4.62E-   |       |        |         |
| Regression | 3       | 6.6E+08  | 08     | 567   | 78       |       |        |         |
|            |         | 1.98E+0  | 8040   |       |          |       |        |         |
| Residual   | 246     | 8        | 14.9   |       |          |       |        |         |
|            |         | 8.58E+0  |        |       |          |       |        |         |
| Total      | 249     | 8        |        |       |          |       |        |         |
|            |         |          |        |       |          |       |        |         |
|            | Coeffic | Standard |        | P-    | Lower    | Upper | Lower  | Upper   |
|            | ients   | Error    | t Stat | value | 95%      | 95%   | 95.0%  | 95.0%   |
|            | -       |          | -      |       |          | -     | -      |         |
|            | 5271.   | 322.916  | 16.32  | 4.32E | _        | 4635. | 5907.9 |         |
| Intercept  | 93      | 6        | 6      | -41   | 5907.96  | 9     | 6      | -4635.9 |
| X Variable | 103.0   | 6.00115  | 17.17  | 5.42E | 91.2607  | 114.9 | 91.260 | 114.90  |
| 1          | 809     | 2        | 685    | -44   | 1        | 011   | 71     | 11      |
| X Variable | 12.81   | 1.66173  | 7.713  | 3.04E | 9.54502  | 16.09 | 9.5450 | 16.091  |
| 2          | 807     | 4        | 668    | -13   | 4        | 111   | 24     | 11      |
| X Variable | 47.42   | 3.35093  | 14.15  | 1.13E | 40.8292  | 54.02 | 40.829 | 54.029  |
| 3          | 944     | 8        | 408    | -33   | 5        | 963   | 25     | 63      |

# Anova (One factor)

| Anova: Single Fac | ctor     |          |          |          |         |          |
|-------------------|----------|----------|----------|----------|---------|----------|
|                   |          |          |          |          |         |          |
| SUMMARY           |          |          |          |          |         |          |
| Groups            | Count    |          |          |          | _       |          |
| Column 1          | 250      | 903280.9 | 3613.123 | 3445221  |         |          |
| Column 2          | 250      | 25534    | 102.136  | 1664.552 |         |          |
|                   |          |          |          |          |         |          |
|                   |          |          |          |          |         |          |
| ANOVA             |          |          |          |          |         |          |
| Source of         |          |          |          |          |         |          |
| Variation         | SS       | df       | MS       | F        | P-value | F crit   |
| Between           |          |          |          |          | 3.1E-   |          |
| Groups            | 1.54E+09 | 1        | 1.54E+09 | 894.0704 | 113     | 3.860199 |
| Within Groups     | 8.58E+08 | 498      | 1723443  |          |         |          |
|                   |          |          |          |          |         |          |
| Total             | 2.4E+09  | 499      |          |          |         |          |

## Anova (Two factor)

| Anova: Two-Factor Without<br>Replication |          |    |         |    |               |    |          |          |     |         |           |
|--|----------|----|---------|----|---------------|----|----------|----------|-----|---------|-----------|
|  |          |    |         |    |               |    |          |          |     |         |           |
| SUMMARY                                  | Cour     | ıt | Sum     |    | Average       |    | Variance |          |     |         |           |
| Row 1                                    | 3        |    | 4097.66 | )  | 1365.887      |    | 5069957  |          |     |         |           |
| Row 2                                    | 3        |    | 2451.12 |    | 817.04        |    | 172517   | 70       |     |         |           |
| Row 3                                    | 3        |    | 1566    |    | 522           |    | 648687   | 7        |     |         |           |
| Row 4                                    | 3        |    | 5095.24 |    | 1698.41       | 3  | 750717   | 73       |     |         |           |
| Row 5                                    | 3        |    | 5140.39 |    | 1713.46       | 3  | 765060   | )9       |     |         |           |
| Row 248                                  |          | 3  |         | 4  | 386.35        | 14 | 62.117   | 59445    | 34  |         |           |
| Row 249                                  |          | 3  |         | 2  | 261.6 753.866 |    | 3.8667   | 1546167  |     |         |           |
| Row 250                                  |          | 3  |         | 4  | 4176.72       |    | 392.24   | 5420980  |     |         |           |
|  |          |    |         |    |               |    |          |          |     |         |           |
| Column 1                                 |          | 2. | 50      | 9  | 903280.9      |    | 13.123   | 34452    | 21  |         |           |
| Column 2                                 |          | 2. | 50      | 2  | 25534         |    | 2.136    | 1664.    | 552 |         |           |
| Column 3                                 | mn 3 250 |    | 50      | 8  | 8659          |    | .636     | 89.69428 |     |         |           |
|  |          |    |         |    |               |    |          |          |     |         |           |
|  |          |    |         |    |               |    |          |          |     |         |           |
| ANOVA                                    |          |    |         |    |               |    |          |          |     |         |           |
| Source                                   | of       |    |         |    |               |    |          |          |     |         |           |
| Variation                                |          | S  | S       | df |               | М. | S        | F        |     | P-value | F crit    |
| Rows                                     |          | 2. | 95E+08  | 2  | 49            | 11 | 82944    | 1.0449   | 989 | 0.33951 | 1.194432  |
|  |          |    | 000 00  | _  |               |    |          | 00=0     |     | 1.9E-   | 0.04000.5 |
| Columns                                  |          | _  | 09E+09  | 2  |               |    | 05E+09   | 925.23   | 361 | 168     | 3.013826  |
| Error                                    |          |    | .64E+08 |    | .98           | 11 | 32016    |          |     |         |           |
| Total                                    |          | 2. | 95E+09  | 7  | 49            |    |          |          |     |         |           |

## **Descriptive Statistics**

| SALES              |             |  |  |  |  |  |
|--------------------|-------------|--|--|--|--|--|
| Mean               | 3553.889072 |  |  |  |  |  |
| Standard Error     | 34.66589212 |  |  |  |  |  |
| Median             | 3184.8      |  |  |  |  |  |
| Mode               | 3003        |  |  |  |  |  |
| Standard Deviation | 1841.865106 |  |  |  |  |  |
| Sample Variance    | 3392467.068 |  |  |  |  |  |
| Kurtosis           | 1.792676469 |  |  |  |  |  |
| Skewness           | 1.161076001 |  |  |  |  |  |
| Range              | 13600.67    |  |  |  |  |  |
| Minimum            | 482.13      |  |  |  |  |  |
| Maximum            | 14082.8     |  |  |  |  |  |
| Sum                | 10032628.85 |  |  |  |  |  |
| Count              | 2823        |  |  |  |  |  |

## Correlation

|          | Column 1 | Column 2 | Column 3 |
|----------|----------|----------|----------|
| Column 1 | 1        |          |          |
| Column 2 | 0.513951 | 1        |          |
|          |          | 1        |          |
| Column 3 | -0.01254 | 0.663973 | 1        |