

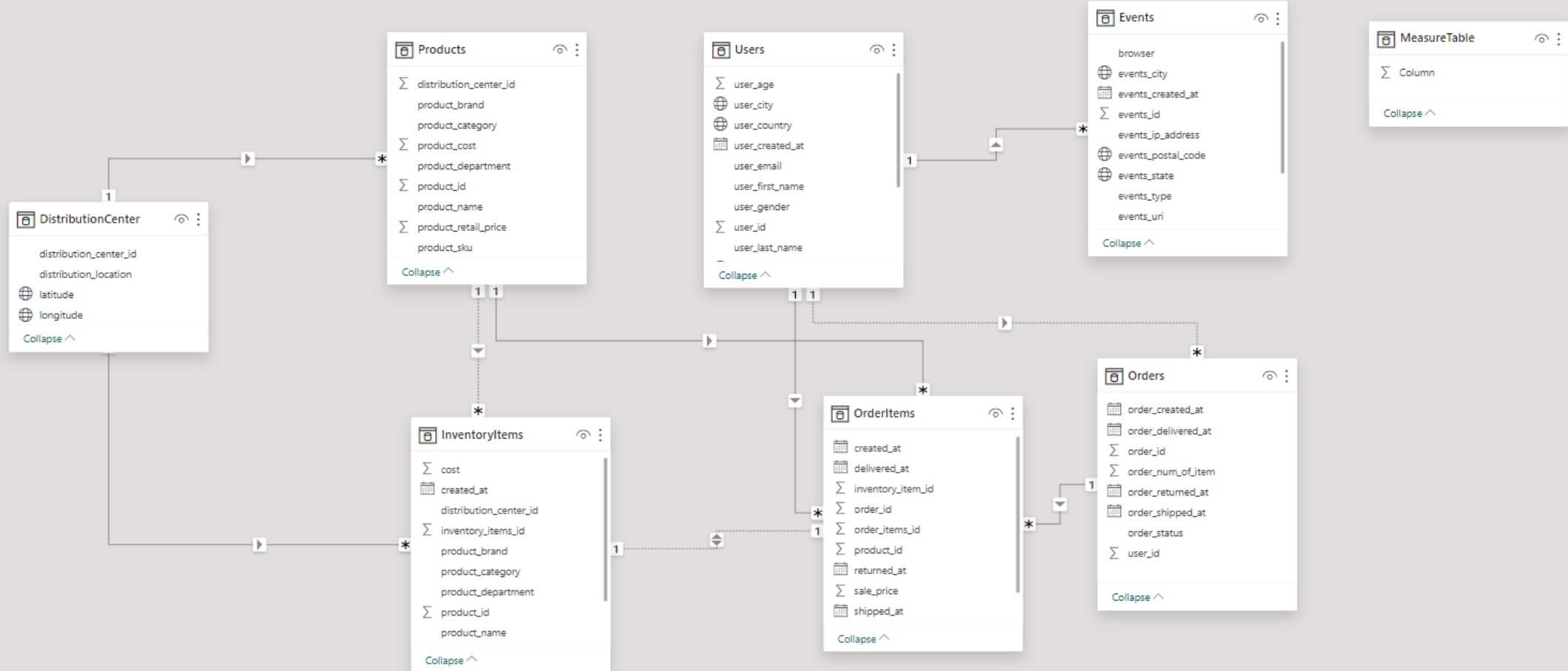
TMDS Exam Solution

BY: Maverick Wong

- Faster Deployment (Python, Airflow, Docker and Power Bi)
- End-to-End Deployment. (ETL Process)
- Technical Issues: Different Operating System, Pandas / PySpark.

Thought Process (Consideration)

- Day 1.
 - Creating Data Pipelines.
 - Creating Workflow. (Fixing Technical Issues)
- Day 2.
 - Creating Dashboards using Power-Bi.
 - Understanding the data at a macro.
- Day 3.
 - Further explorations using Python.
 - Understanding the further the data.



\$11M

Total sales

100K

Unique Customers

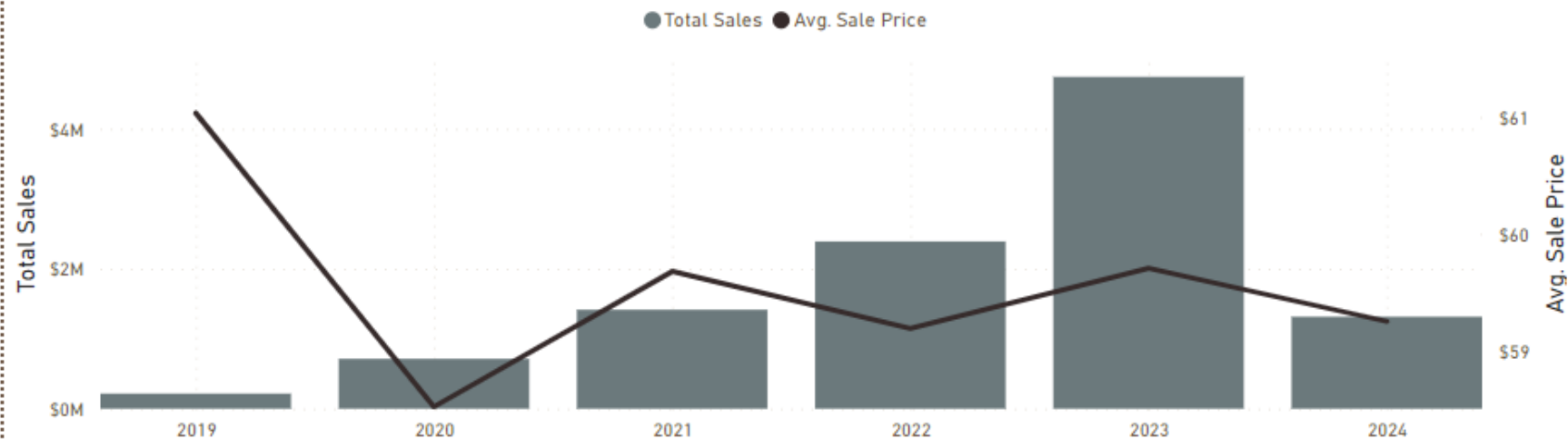
125K

Total orders

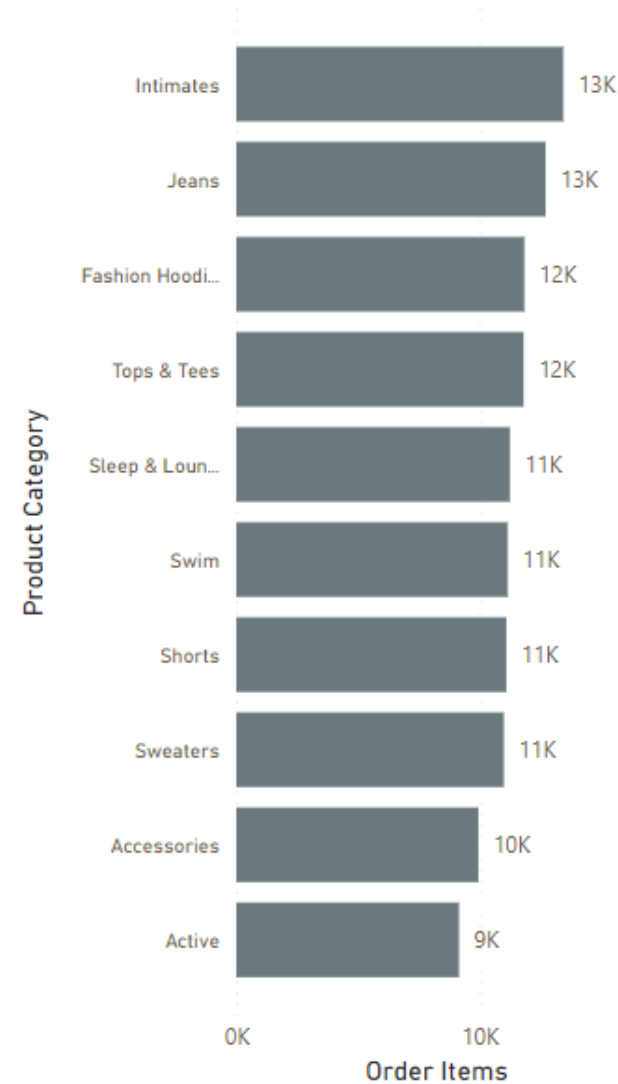
181K

Total number of items ordered

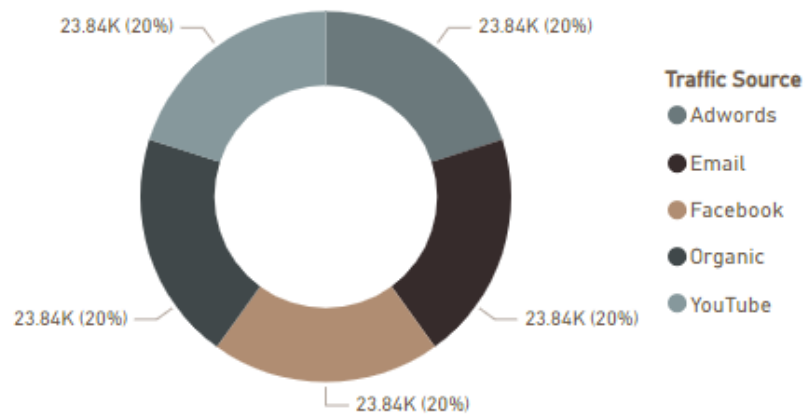
Total Sales and Avg. Sale Price by Year



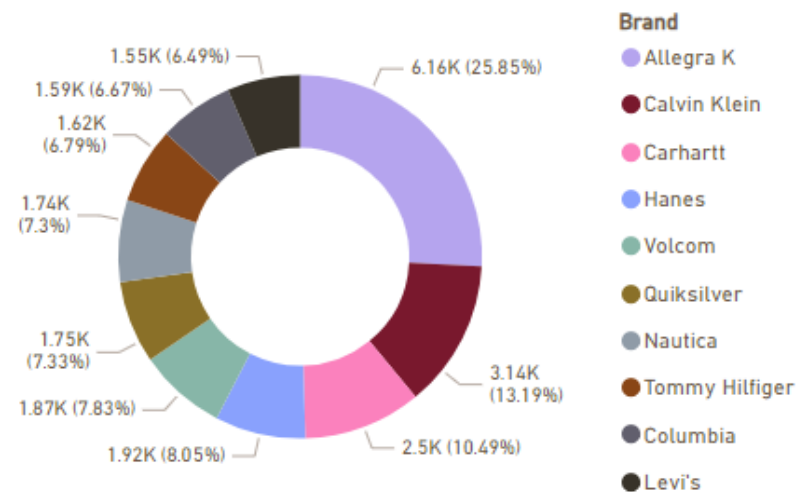
Top Ordered Items by Category



Top Ordered Items by Traffic Source



Top Ordered Items by Brand



\$11M

Total sales

100K

Unique Customers

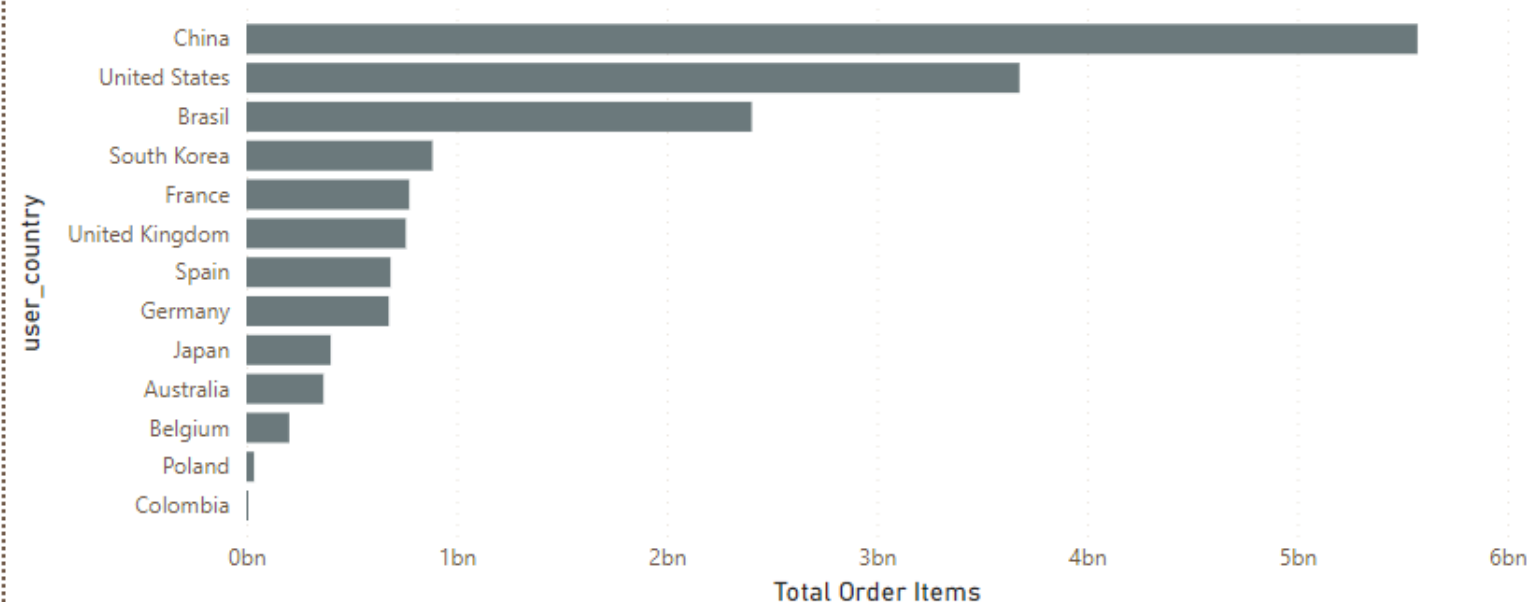
125K

Total orders

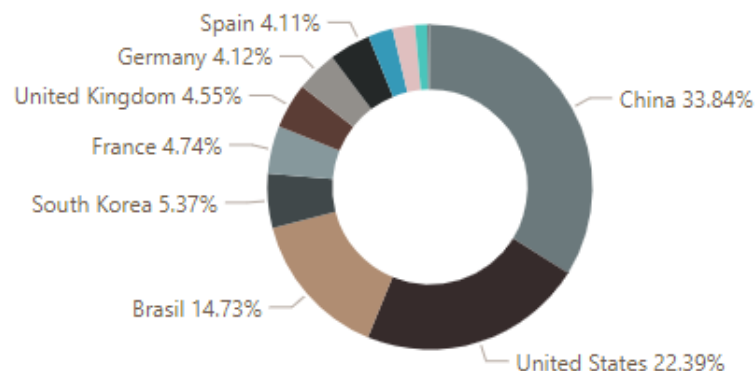
181K

Total number of items ordered

Total Order Items by user_country

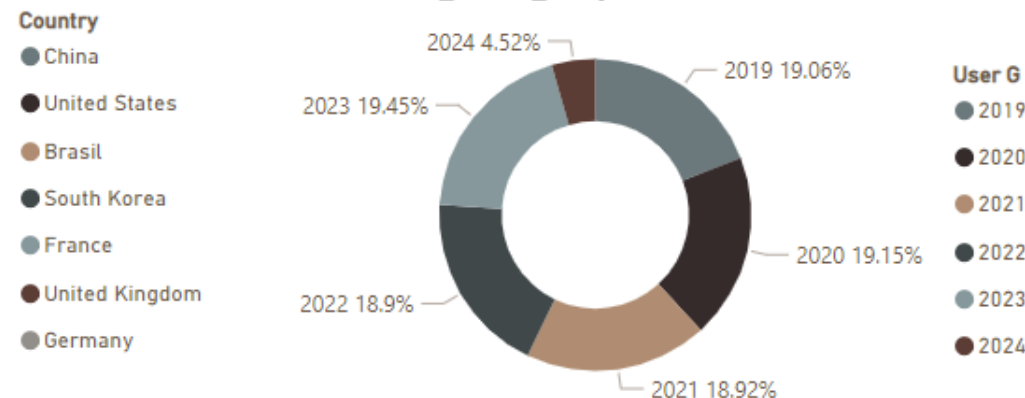


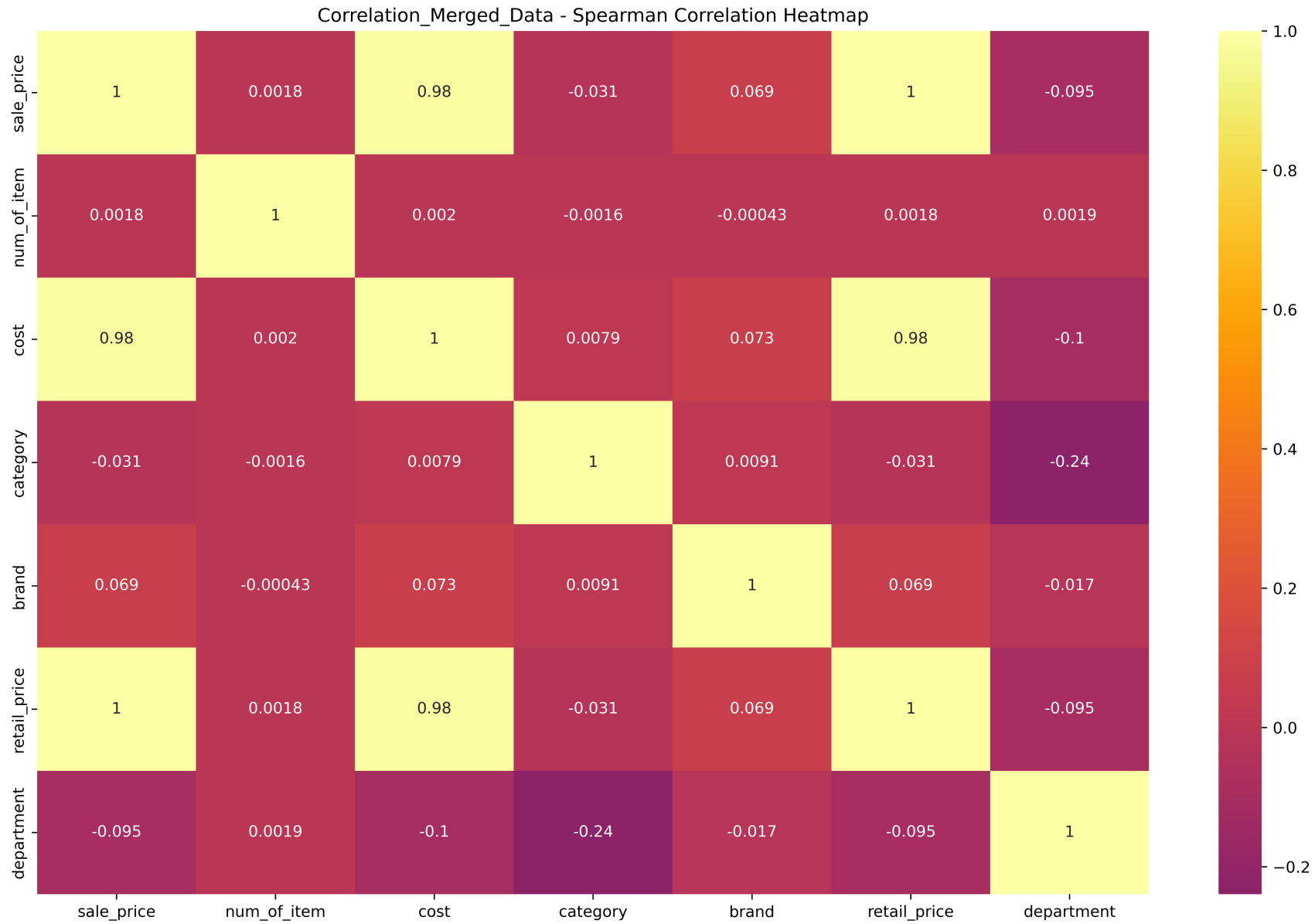
Total Order Items by Country



Country	Given Name	Total Sale Price	Total Number of Order
China	Michael	\$87,123.77	1350
China	John	\$65,564.87	999
United States	Michael	\$63,263.70	987
China	James	\$59,931.17	897
China	David	\$59,116.34	901
China	Christopher	\$56,268.45	863
China	Robert	\$49,554.86	789
China	Jennifer	\$48,021.82	875
China	William	\$40,312.76	617
China	Matthew	\$38,964.04	614
United States	John	\$38,244.10	633
United States	James	\$37,574.34	571
United States	David	\$37,520.62	561
China	Brian	\$36,669.85	537
Brasil	Michael	\$35,043.72	614
China	Joseph	\$35,019.61	567
United States	Robert	\$34,461.99	576
China	Daniel	\$34,134.17	537
China	Michelle	\$33,780.01	570
China	Lisa	\$33,553.87	603

Count of order_items_id by Year





- Based on evidence, the company should focus their attention to their biggest markets - China, United States, Brazil and South Korea. Those countries accumulate the biggest order to date. Sales distribution on these areas must be streamlined, lowering down the baseline cost achieving more average order value. As shown, baseline cost can affect retail and sale prices therefore increasing growth and revenue rate in the future.
- Second, focus on top categories and top brands with the highest order items. Those brands has performing very well based on the report. With the categories, the recommendation is to expand the product lines and/or services on these key areas. Ideally over 75% percentile of categories should be considered.
- Streamline distribution on key location and key brands.
- Expand the product line on well-performing categories.