

ZARA Sales Analysis Report

This dataset contains 252 unique order IDs detailing product sales from Zara stores on February 19, 2024, recorded between 8:50:06 and 9:10:52.

Descriptive Analysis/ Data Profiling

| | Sales Volume | price |
|--------------------|--------------|-------|
| mean | 1823.7 | 86.3 |
| median | 1839.5 | 79.9 |
| mode | 1466.0 | 89.9 |
| standard deviation | 697.7 | 52.1 |
| minimum | 529.0 | 8.0 |
| maximum | 2989.0 | 439.0 |
| Range | 2460.0 | 431.0 |
| Q1 | 1243.0 | 49.9 |
| Q3 | 2398.8 | 109.0 |
| IQR | 1155.8 | 59.1 |
| Outliers (Lower) | -490.6 | -38.8 |
| Outliers (upper) | 4132.4 | 197.7 |

Sales Volume:

The **Sales Volume** data are **clean and well-behaved**, as **no outliers** were detected.

- **No Extreme Values:** All data points fall within the expected, natural range, indicating a homogeneous distribution.
- **Data Reliability:** The absence of extreme values suggests the data is likely reliable and free from significant errors (e.g., typos or measurement mistakes) that would create anomalous spikes or dips.
- **Normal Variation:** The variations observed are standard and do not indicate any special anomalies or "signals" that require immediate investigation.

Item Price

The **Item Price** data shows positive skewness and contains four upper outliers, but no lower outliers were found.

- **Potential Data Errors:** The outliers *may* indicate data entry errors that resulted in unusually high price points.

- **Unique Product Representation:** Alternatively, these outliers could be legitimate values representing the sales of genuinely high-end or luxury products within the dataset.

Insights:

1. **Product Position** Products located in the Aisle generate the highest sales, accounting for 38% of total sales volume. This suggests that these items hold a prime placement or are in high demand.
2. **Sales by Section** The Men's section sales significantly dominate the transactions, representing 86.21% of sales volume compared to 13.79% for Women's. The PLAID TIE DYE OVERTSHIRT is the top-selling men's item, and the GATHERED WAIST KNIT SWEATER is the top-selling women's item.
3. **Pricing Strategy** Sales volume correlates strongly with the mode price (the most common price point). The highest sales volumes are achieved by products priced at this accessible point. Conversely, the highest-priced items have the lowest sales volume. This pattern suggests an effective pricing strategy where current pricing aligns well with customer willingness to buy.
4. **Promotion Impact** Promotions do not appear to be driving sales, as the sales volume for items without a promotion is higher than for items with one. This finding warrants further investigation into the effectiveness and targeting of current promotional campaigns.

More insights:

- **Total Revenue:** \$38,988,476.48
- **Average Item Price:** \$86.30
- **Average Sales Volume per Second:** 1.762 units
- **The item generating the Highest-Revenue is the VINTAGE EFFECT LEATHER BOMBER JACKET** (priced at \$299).
- **The Top-Selling Product** (by volume) is the PLAID TIE DYE OVERTSHIRT.
- **The Top-Selling Category** (by volume) is Men.

| Metric | Sales Volume (Units) | Price (\$) | Insight/Implication |
|--------------------|--|--|--|
| Median vs. Mean | Median (1839.5) ≈ Mean (1823.7) | Mean (86.3) > Median (79.9) | Sales Volume is Symmetrical: Consistent demand. Price is Right-Skewed: The few higher-priced items (outliers) pull the average price up. |
| Mode Price | Mode Price (89.9) aligns with Highest Volume | 89.9 | Validated "Sweet Spot": The most common price point is also the most successful in driving volume. |
| Standard Deviation | SD (697.7) is high relative to the mean | SD (52.1) is high relative to the mean | High Variability: Both units sold and pricing show large spreads, indicating a diverse product mix and fluctuating demand within the short window. |
| Outliers | No Outliers | 4 Upper Outliers | No Volume Anomalies: Sales performance is internally consistent. Pricing Extremes Exist: Four products skew the overall price analysis (likely luxury/unique items). |

Key Business Decisions and Actions:

1. **Men's Dominance (86.21%):** Review inventory levels for top-selling men's items (like the PLAID TIE DYE OVERTSHIRT) to prevent stock-outs.
2. **Women's Underperformance (13.79%):** Investigate and Reallocate, Is the target customer profile for women's wear not active during this 8:50-9:10 AM window? Analyze historical data to find their peak purchasing time. If performance is consistently low, reallocate marketing budget away from this time slot or aggressively promote top-selling women's items during this time to test for volume lift.
3. **Highest Selling Women's Item (GATHERED WAIST KNIT SWEATER):** Give this specific item a prime position (e.g., Aisle slot or prominent banner) and ensure its price is competitive.
4. **Aisle" Position:** Maintain and analyze the current product mix within the "Aisle" position. Test moving lower-performing men's items into the "Aisle" to see if sales lift, leveraging the established customer behavior
5. **High-Revenue Item:** Analyze margins on this high-revenue item. Ensure it is given premium online positioning (e.g., above the fold) and is included in any high-value customer retargeting campaigns.
6. **Highest Volume at Mode Price (\$89.9):** Review pricing for products near but not at the mode price (e.g., \$79.9 or \$99.9). Consider moving high-volume items closer to \$89.9 to maximize demand. This is your price elasticity ceiling for volume.
7. **Sales Volume without Promotion is Higher:** non promotional item sales more, Immediately investigate the type of promotions used. Are they *discounting* low-demand items?
8. **Upper Outliers (4 items above \$197.7):** Audit the 4 items to confirm they are legitimate prices (not errors). If legitimate, create a "Luxury/Premium" segment for these products and exclude them from general promotional analysis to avoid skewing overall results.