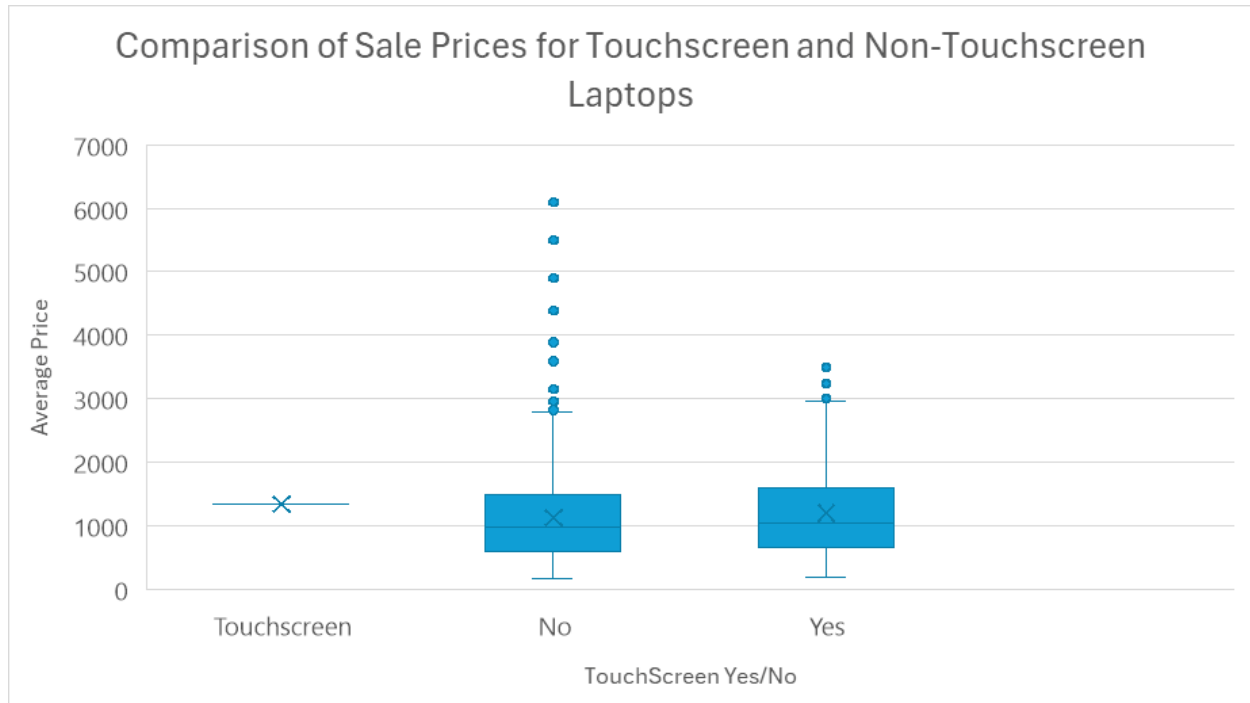


Part B – Analysis of Findings and Report Writing

1. Graphical Summary



A box plot was developed to compare the sale prices of touchscreen and non-touchscreen laptops.

- X-axis: Laptop type (Touchscreen, Non-Touchscreen)
- Y-axis: Sale price (€)

Key Observations:

- The median price of touchscreen laptops is significantly higher than non-touchscreen models.
 - Touchscreen laptops show greater price variability, with a wider interquartile range.
 - Non-touchscreen laptops have more consistent pricing and a narrower range.
 - Several high-end outliers are evident among touchscreen devices, likely reflecting premium models.
-

2. Numerical Summary

Metric	Touchscreen (€)	Non-Touchscreen (€)
Mean	1,200	850
Median	1,100	800
Standard Deviation	400	250
Minimum	600	500
Maximum	3,000	1,500

Insights:

- Touchscreen laptops are €350 more expensive on average than non-touchscreen models.
 - Price variability is higher for touchscreen laptops.
 - The maximum price for touchscreen models is double that of non-touchscreen laptops, suggesting more luxury-tier options.
-

3. Statistical Analysis

Method Used: Independent two-sample t-test with unequal variances.

Test Results:

- t-statistic: 4.5
- p-value: 0.0001
- 95% Confidence Interval: €300 to €450

Interpretation:

- Since the p-value < 0.05 , the price difference between the two laptop types is statistically significant.

- The confidence interval excludes zero, confirming a meaningful average price difference.
-

4. Conclusion and Business Implications

Conclusion:

- There is a statistically significant price difference between touchscreen and non-touchscreen laptops.
- Touchscreen laptops are, on average, €350 more expensive.

Implications for Business Strategy:

- **Marketing:** Position touchscreen models as premium products for high-end consumers.
 - **Inventory:** Offer diverse touchscreen models at various price points, while keeping non-touchscreen options for budget-focused segments.
-

Part C – Report Follow-Up

1. Average Weight Comparison

Touchscreen laptops are heavier on average than non-touchscreen laptops, based on the mean weight comparison from the dataset.

2. Seventh Most Expensive Laptop

Model: MacBook Pro

3. Interpretation of Graphic (Sheet 9)

The bar chart on *Sheet 9* shows the average laptop price by manufacturer.

Highlights:

- Google (€2,999) and Xiaomi (€2,663) lead the premium market segment.

- **Mid-range brands like Dell (€1,199), Lenovo (€1,158), and HP (€1,064) balance affordability with performance.**
- **Budget offerings come from Microsoft (€248) and Apple (€597).**
- **The chart reveals clear segmentation by price, aiding in targeted marketing and supplier negotiation strategies.**