# Comparing Our Promotions

## Evaluating the Effectiveness of Our Marketing Campaigns

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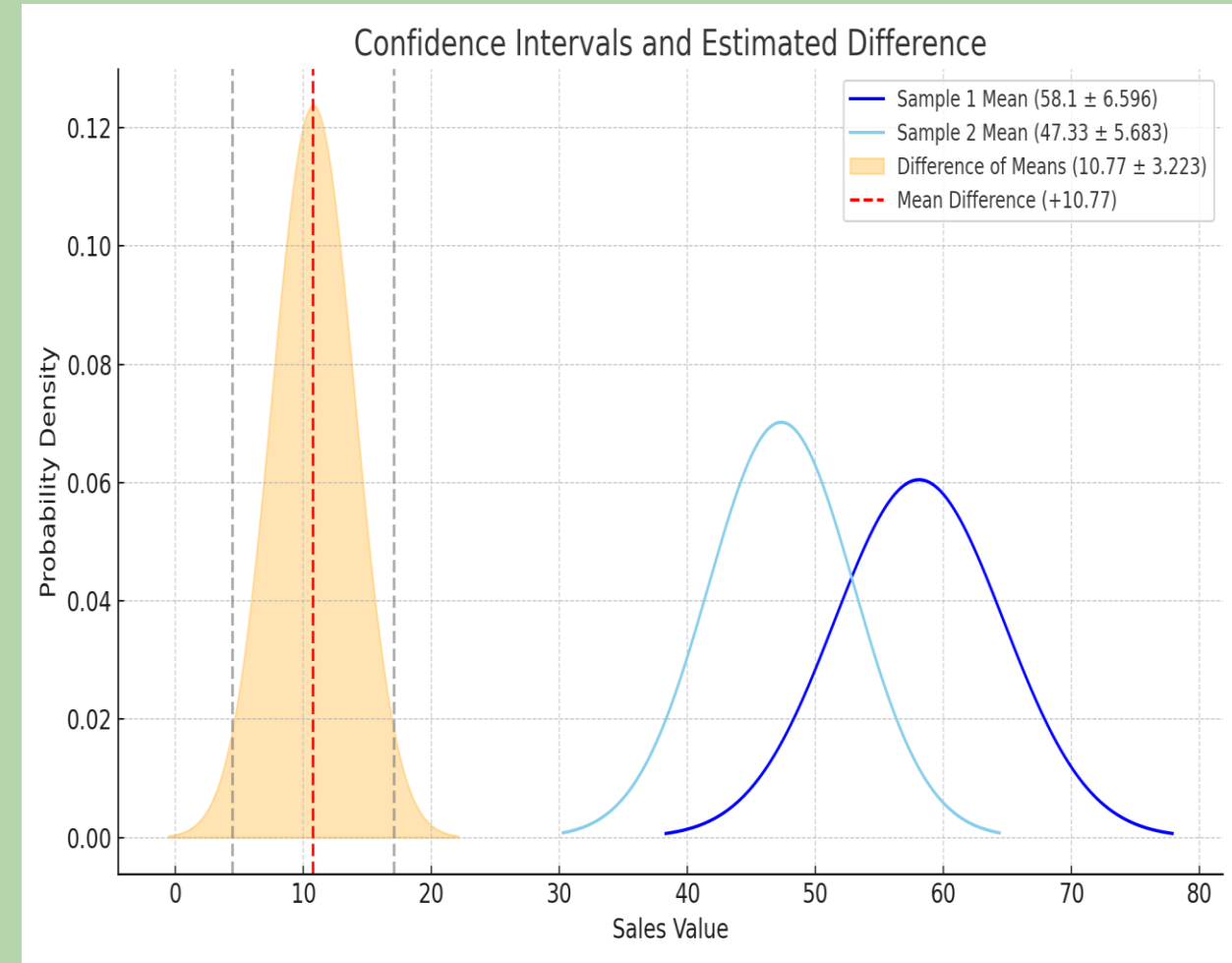# Our Objectives and Measurement Approach

🔍 **What Are We Trying to Find?**

- Evaluate the effectiveness of three distinct marketing promotions.

- Identify which promotion generates the highest sales.

📊 **How Did We Measure?**

- Calculated total weekly sales in thousands for each promotion at each location.

- Focused on sales directly tied to revenue, ensuring accurate measurement of campaign success.
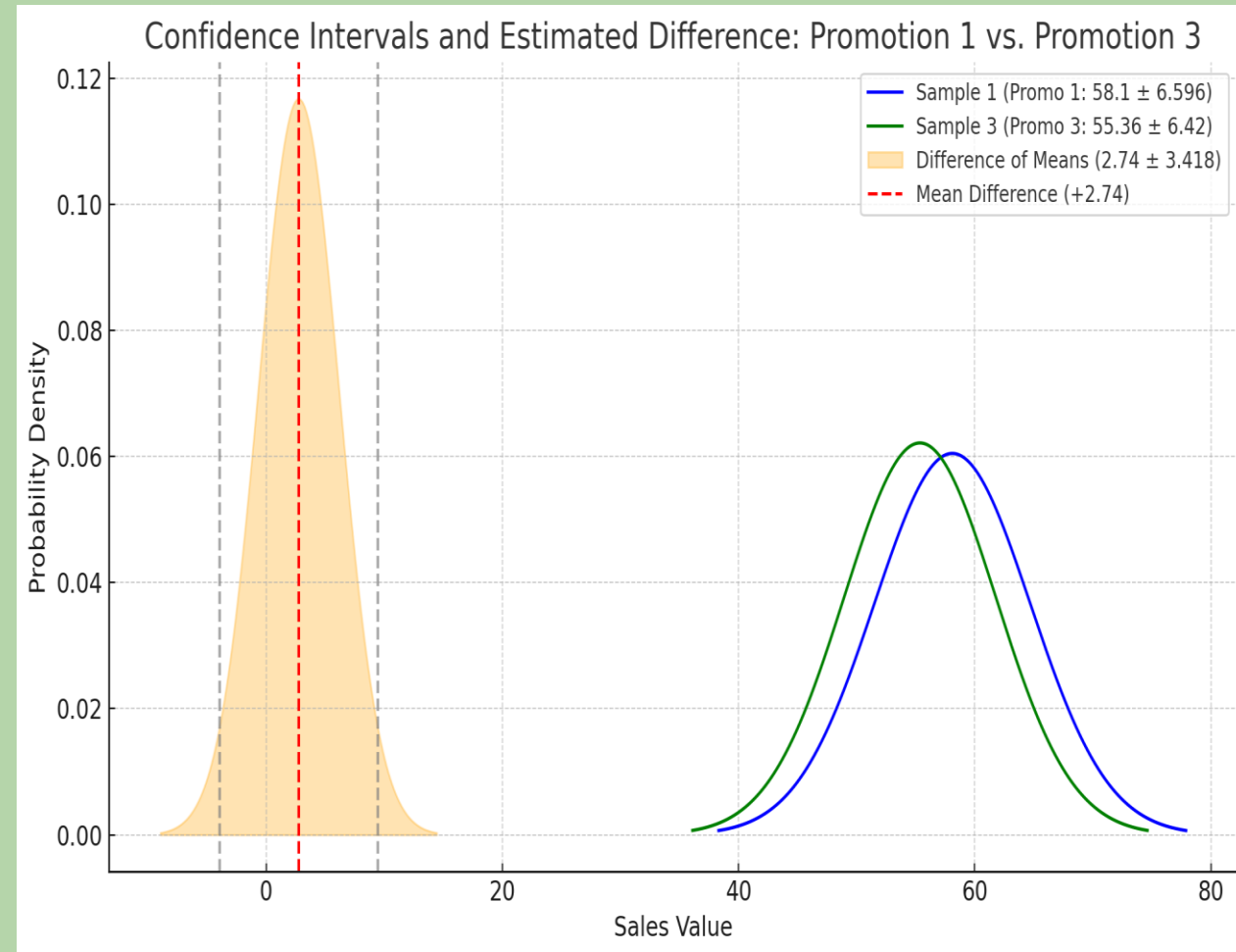
# A/B Test Results: Promotion 1 vs. Promotion 2

- **Test Overview:** Comparing the effectiveness of Promotion 1 and Promotion 2.

- **Treatment Effect:** +10.77 (Sales increase with Promotion 1).

- **P-Value:** 0.0013 (Statistically significant at 0.01 level).

- **Conclusion:** Promotion 1 significantly outperforms Promotion 2.



Confidence Intervals and Estimated Difference

Legend:
- Sample 1 Mean (58.1 ± 6.596)
- Sample 2 Mean (47.33 ± 5.683)
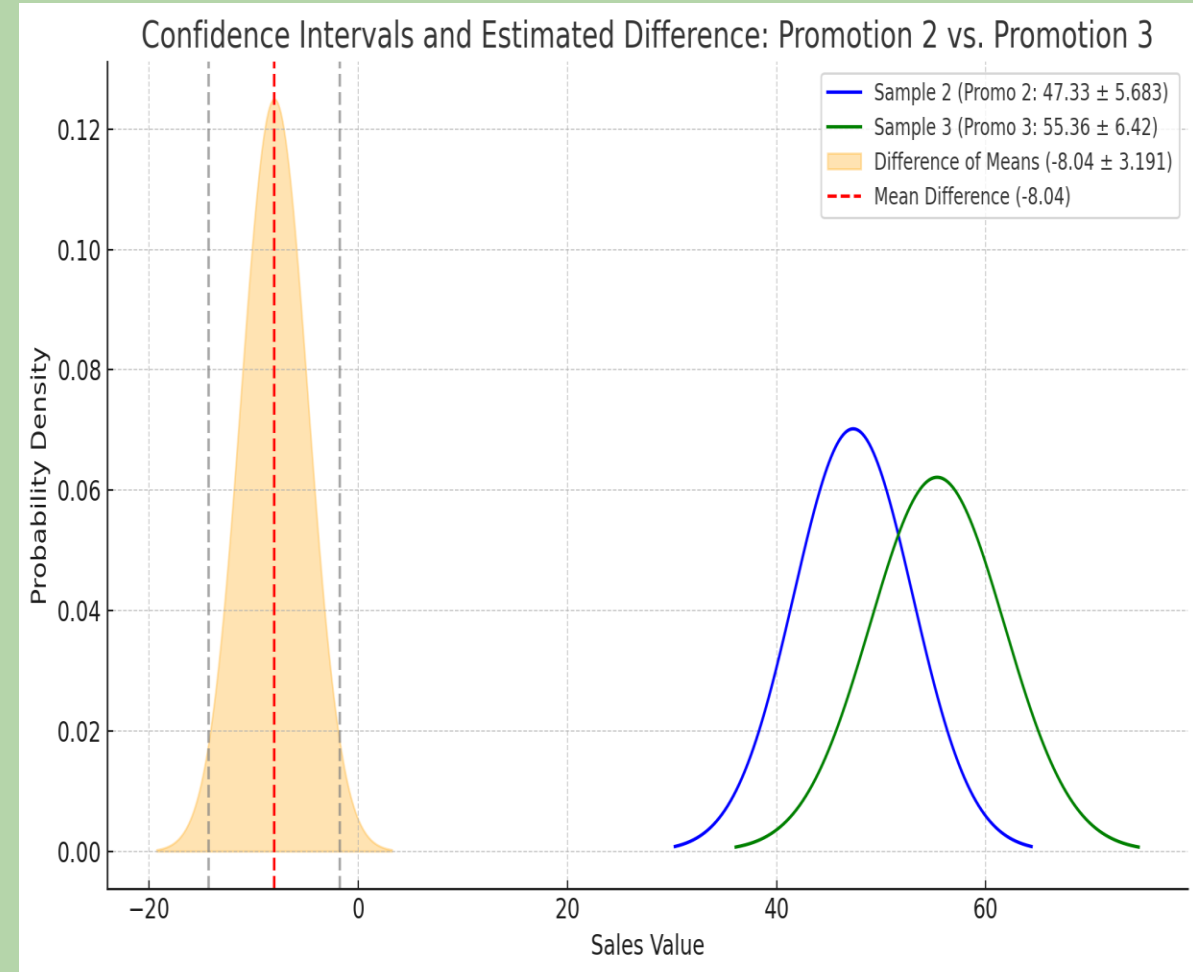- Difference of Means (10.77 ± 3.223)
- Mean Difference (+10.77)

# A/B Test Results: Promotion 1 vs. Promotion 3

- **Test Overview:** Comparing the sales performance of Promotion 1 and Promotion 3.

- **P-Value:** 0.4259 (Not statistically significant).

- **Conclusion:** Similar sales performance between the two promotions.



Confidence Intervals and Estimated Difference: Promotion 1 vs. Promotion 3
- Sample 1 (Promo 1: 58.1 ± 6.596)
- Sample 3 (Promo 3: 55.36 ± 6.42)
- Difference of Means (2.74 ± 3.418)
- Mean Difference (+2.74)

# A/B Test Results: Promotion 1 vs. Promotion 3

- **Test Overview:** Comparing the sales performance of Promotion 2 and Promotion 3.

- **Treatment Effect:** -8.04 (Slightly lower sales for Promotion 2).

- **P-Value:** 0.0136 (Not statistically significant at 0.01 level).

- **Conclusion:** No significant difference. Promotion 3 slightly outperforms Promotion 2.



Confidence Intervals and Estimated Difference: Promotion 2 vs. Promotion 3

- Sample 2 (Promo 2: 47.33 ± 5.683)
- Sample 3 (Promo 3: 55.36 ± 6.42)
- Difference of Means (-8.04 ± 3.191)
- Mean Difference (-8.04)

# Key Recommendations and Next Steps

**Strategic Recommendations**

- **Maximize Impact with Promotion 1:** Prioritize and scale this campaign to drive the highest sales.

- **Leverage Promotion 3:** Use it as an alternative if scaling Promotion 1 is not feasible.

- **Reevaluate Promotion 2:** Review its performance and consider strategy adjustments or discontinuation.

**Actionable Next Steps**

- 🔍 **Investigate Success Drivers:** Conduct an in-depth analysis to understand the factors behind Promotion 1's success.

- 📊 **Assess Scalability:** Evaluate operational capacity for scaling Promotions 1 and 3.

- 🚀 **Optimize Promotion 2:** Explore targeted improvements to enhance its performance.