

Project Overview

Analysis of 2,600 digital ad campaigns (Jan–Dec 2024) for a Data Analytics course. Cleaned inconsistent data and delivered actionable insights to improve profitability without increasing spend.

Business Impact

- **Current Profit:** \$3.15M on \$538K spend
- **ROAS:** 6.6x with potential to reach **7.5–8.0x**
- **Optimization Upside:** **+\$450K–\$600K profit** (15–20%)
- **Immediate Waste:** \$50K+ from losing campaigns

Key Insights

Campaign Performance

- 91% of campaigns profitable
- 234 losing campaigns represent quick-win optimization

Device Performance

- Desktop: Top performer at \$1.08M profit (6.57 ROAS)
- Mobile: Strong second at \$1.05M profit (6.41 ROAS)
- Tablet: Profitable but weakest performer

Keyword Performance

- “learn data analytics” delivers highest ROAS
- All keywords profitable, but with large efficiency gaps

Timing Trends

- Clear day-of-week and seasonal performance patterns

Top Recommendations

1. **Pause Losing Campaigns**
 - Recover \$50K+ in 30 days
 - Low effort, immediate impact
2. **Reallocate Budget to Winners**

- Shift 10–15% spend from Tablet to Desktop and top keywords
- +\$175K–\$225K incremental profit

3. Focus on Best Device–Keyword Pairs

- Prioritize top 10 combinations, reduce weakest performers
- 12–18% improvement in CPA

Expected ROI

- **30 Days:** +\$115K profit, ROAS to ~7.0x
- **60–90 Days:** +\$450K–\$600K profit, ROAS up to 8.0x

Bottom Line

Strong campaigns are already performing well, but targeted, data-driven reallocations can unlock **15–20% more profit** with no increase in ad spend. Start with quick wins in week one to show immediate value.