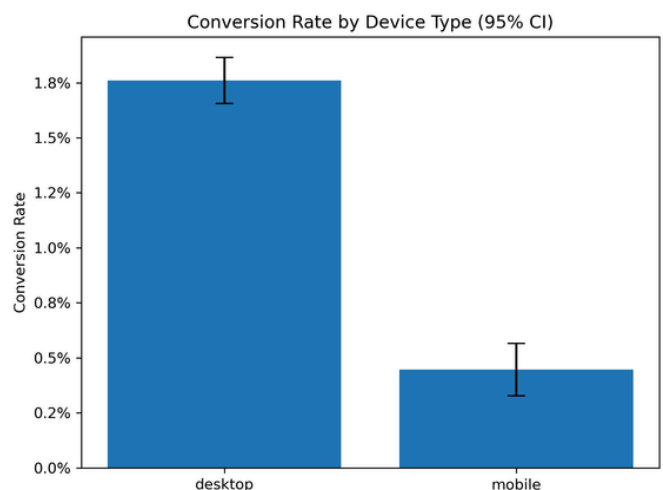# EXECUTIVE SUMMARY

OVERVIEW

This analysis assesses whether desktop and mobile users convert at meaningfully different rates using Google Analytics session-level data collected over a one-month period (August 2016). The goal is to quantify the magnitude of the conversion gap and evaluate its statistical significance and business relevance.

KEY FINDINGS

- Desktop sessions converted at a rate of **1.76%**, compared to **0.45%** for mobile sessions.
- The estimated difference in conversion rates (desktop − mobile) was **1.31 percentage points**.
- This difference is statistically significant (χ^2 test, $p < 0.001$).
- The 95% confidence interval for the conversion rate difference was **[1.16, 1.47]** percentage points, indicating a large and precisely estimated effect.

In August, approximately 12,100 mobile sessions were observed. Even at the conservative lower bound, the estimated conversion gap implies roughly **140 unrealized conversions**, corresponding to approximately **$24k in unrealized monthly revenue** based on observed order values, or approximately **$280k annually** if the gap persists.

Conversion Rate by Device Type (95% CI)

RECOMMENDATIONS

- Prioritize deeper funnel analysis for mobile users to identify where drop-off differs from desktop.
- Focus future experimentation and optimization efforts on mobile experiences.
- Revisit this analysis over additional time periods to assess persistence across seasons or campaigns.

GOOGLE ANALYTICS