

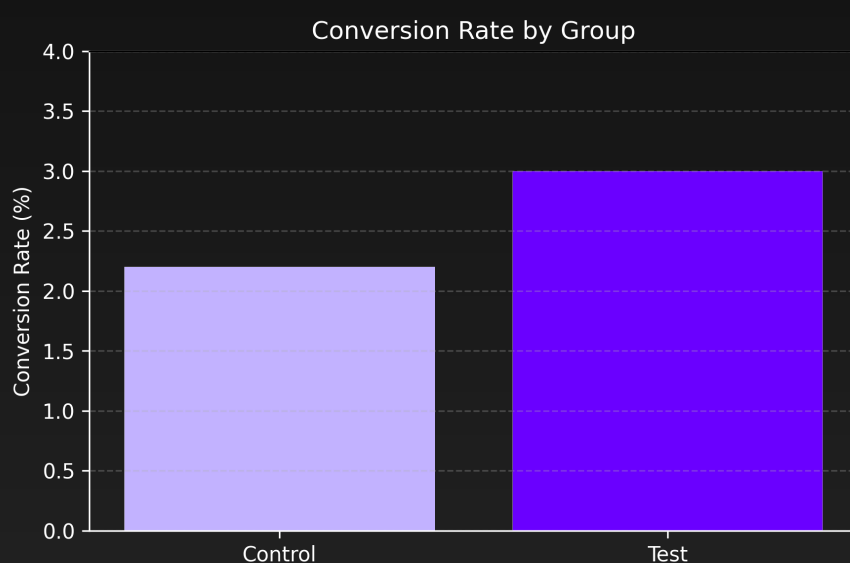
Incrementality Analysis: Simulated TikTok Campaign

Introduction: This analysis simulates a structured incrementality test designed to evaluate the true impact of a TikTok advertising campaign on user conversions and revenue.

A user-level dataset of 10,000 individuals was generated, with users randomly assigned to either a control group (no ad exposure) or a test group (exposed to TikTok ads). Each user record included ad impressions, conversion outcomes, and revenue if a conversion occurred.

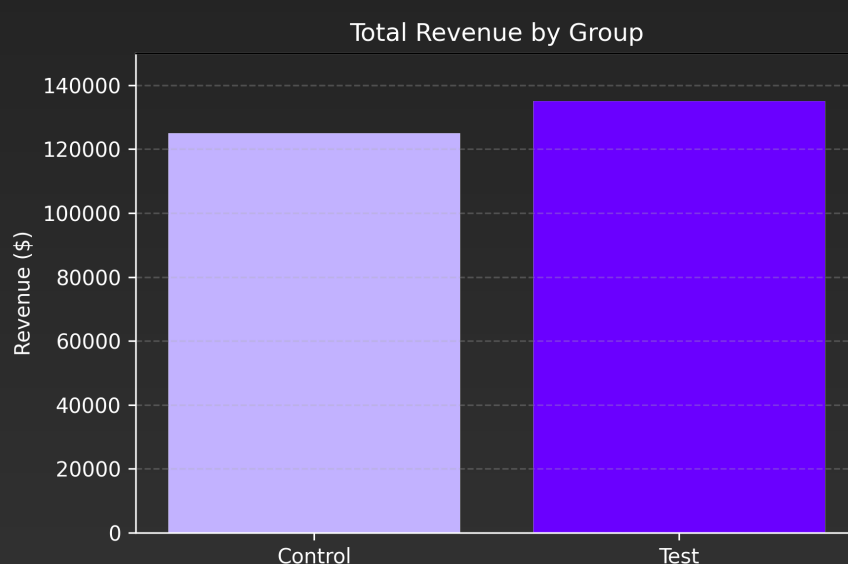
I aggregated the dataset to calculate key performance indicators (KPIs), including **conversion rate** and **total revenue**, allowing for a clear comparison between the groups. This framework mirrors how Rockerbox enables brands to measure campaign effectiveness and confidently optimize marketing spend.

Conversion Rate by Group



Users who saw TikTok ads converted at **3.0%**, compared to **2.2%** in the control group. This reflects a **36.36% lift in conversion**, demonstrating strong incremental impact.

Total Revenue by Group



The test group generated **\$135,000** in revenue versus **\$125,000** from the control, indicating an **8% revenue lift** from the ad exposure.

This test represents the kind of structured experimentation marketers can rely on to evaluate true campaign value—not just correlation, but causation.

Takeaway: The test group outperformed the control group with a **36% lift in conversions** and an **8% increase in revenue**, confirming that the TikTok campaign delivered meaningful incremental impact. Based on these results, further investment in the channel—potentially by increasing ad frequency or segmenting by high-performing cohorts—could unlock even stronger performance and more efficient spend.

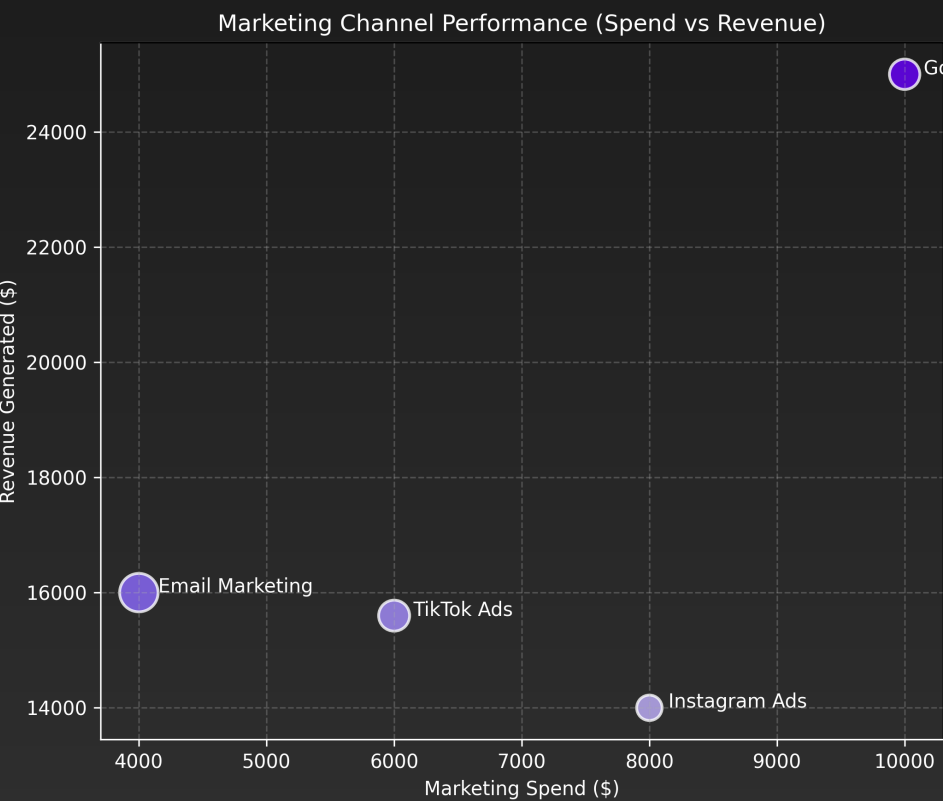
Marketing Spend Optimization: Channel Efficiency Analysis

Introduction: This analysis simulates a marketing spend optimization scenario using mock performance data across four advertising channels.

A dataset was constructed with each channel’s **marketing spend** and **resulting revenue**, allowing calculation of **Return on Ad Spend (ROAS)** as a performance benchmark. I then visualized the relationship between spend and return to identify areas for potential reallocation and efficiency gains.

Channel	Spend(\$)	Revenue(\$)	ROAS
Instagram Ads	8,000	14,000	1.75
Google Search	10,000	25,000	2.50
Tiktok Ads	6,000	15,600	2.60
Email Marketing	4,000	16,000	4.00

The chart below maps **spend vs. revenue**, with bubble size representing ROAS—highlighting which channels are over- or under-performing relative to their budget.



Email Marketing and TikTok delivered the highest ROAS at **4.0x** and **2.6x** respectively, despite having lower spend. Instagram, with a lower ROAS of **1.75x**, represents an over-invested channel relative to its return.

Takeaway: The analysis reveals that **Email Marketing** and **TikTok Ads** are significantly underfunded relative to their performance, delivering ROAS of **4.0x** and **2.6x**, respectively. In contrast, **Instagram Ads** has the lowest ROAS at **1.75x**, indicating inefficient budget allocation.

Based on these findings, I recommend **reducing spend on Instagram Ads** and **reallocating budget toward TikTok and Email**, both of which demonstrate stronger efficiency and revenue-generating potential.

This type of spend rebalancing can be implemented without increasing total budget and could improve overall marketing ROI by shifting dollars to higher-performing channels. It reflects the kind of data-backed, strategic guidance I would bring to Rockerbox—where the focus is not just on measurement, but on driving smarter marketing investment decisions.