

# Website Analytics & Marketing Optimization Report

## 1. Traffic Source Analysis

### Objective:

Understand where customers are coming from and identify which channels drive the highest quality traffic.

### Use Cases:

- Analyze search data to shift budget toward engines, campaigns, or keywords with stronger conversion rates.
- Compare user behavior patterns across traffic sources to inform creative and messaging strategy.
- Identify opportunities to eliminate wasted spend or scale high-converting traffic.

### Paid Campaign Tracking (UTM Parameters):

- Paid traffic is tagged with UTM parameters, allowing us to tie website activity back to campaigns.
- Session data (with UTM tags) is linked to order data to measure revenue contribution.

### Analysis Performed:

- Selected sessions with IDs between 1000–2000.
- Grouped data by `utm_content`.
- Calculated:
  - Number of unique sessions
  - Number of unique orders
  - Conversion rate (orders ÷ sessions)
- Sorted results by session volume (descending).

### Finding:

This analysis compared campaign performance by `utm_content` and revealed how well sessions converted into orders.

### CEO Request:

- Provide a breakdown of sessions by `utm_source`, `utm_campaign`, and referring domain.
- Finding: **gsearch nonbrand** campaign generated the most sessions.

### CEO Response:

- Suggested deeper analysis of **gsearch nonbrand** for optimization opportunities.
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## 2. Conversion Rate Analysis

### Marketing Director Request:

- Calculate conversion rate (CVR) from session to order for **gsearch nonbrand** traffic.
- Threshold for viability:  $\text{CVR} \geq 4\%$ .

### Result:

- Sessions: **3,895**
- Orders: **112**
- Conversion Rate: **2.88%**

### Response:

- CVR below threshold.
- Recommendation: Reduce bids to avoid overspending.
- Outcome: Analysis prevented unnecessary ad spend.

### Business Concept: Bid Optimization & Trend Analysis

- Use conversion rate and revenue per click to guide spend decisions.
- Monitor bid changes to understand effects on volume and cost efficiency.

### Next Steps (Director):

- On 2012-04-15, bids for gsearch nonbrand were reduced.
- Requested **weekly trended session volume** to evaluate impact.

### Result:

- Analysis confirmed traffic volume was sensitive to bid changes.
  - Director acknowledged balance between maximizing volume and cost efficiency.
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## 3. Device-Level Conversion Analysis

### Director Request:

- Calculate conversion rates by device type (desktop vs. mobile).

**Result:**

- Desktop CVR: **3.73%**
- Mobile CVR: **0.96%**

**Response:**

- Decision to increase bids for **desktop traffic** due to stronger performance.
- Follow-up request: Track desktop vs. mobile sessions after bid adjustments.

**Finding:**

- Desktop sessions increased after the bid adjustment.
- Mobile sessions remained flat or declined slightly.

**Next Steps:**

- Continue monitoring session volume and conversion rates by device.
  - Optimize spend allocation accordingly.
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## 4. Top Website Content Analysis

**Objective:**

Identify most-viewed pages to prioritize optimization efforts.

**Use Cases:**

- Determine most-viewed and entry pages.
- Assess performance of high-traffic pages against business goals.

**Analysis Performed:**

- Created a temporary table to find the first pageview (`min (pageview_id)`) per session.
- Counted distinct sessions for each entry page.

**Finding:**

- **Homepage** accounted for nearly all first pageviews (523 sessions).

**Website Manager Request (Morgan):**

- Pull top viewed and entry pages.
- Confirm where users land when entering the site.

**Result:**

- Traffic primarily enters via homepage.

**Morgan's Response:**

- Homepage is the critical landing point and a top candidate for optimization.
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## 5. Landing Page Performance & Testing

**Objective:**

Evaluate homepage bounce rate and test impact of a new custom landing page.

**Analysis Performed:**

- Step 1: Find first pageview for each session.
- Step 2: Identify landing page.
- Step 3: Count pageviews to identify bounces.
- Step 4: Summarize sessions, bounces, and bounce rate.

**Finding:**

- Homepage bounce rate: ~~~60~~%

**Manager's Response:**

- Bounce rate considered too high.
- A new **custom landing page (/lander-1)** was created for paid search traffic.

**Experiment:**

- A/B test between /home and /lander-1.
- Bounce rate analysis performed for the test period.

**Result:**

- /lander-1 bounce rate was **5% lower** than homepage.

**Manager's Response (Morgan):**

- Confirmed success of custom lander.
- Plan: Redirect all non-brand paid traffic to /lander-1.
- Requested follow-up trend analysis in upcoming weeks.

**Next Steps:**

1. Confirm all non-brand paid traffic routes to the new custom lander.
2. Monitor bounce rates and analyze long-term trends.
3. Identify further testing and optimization opportunities.