

# Marketing Data and Technology



Draw Insights from  
Marketing Data



# Part One: Setting Goals

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# Identify Key Business Objectives

**Key Business Objective:** A defined goal or outcome used to plan the desired direction of your company. Write at least 3 but no more than 5 business objectives that support your business model. Each objective should be SMART.

1	<i>Increase Online Sales by 20% in Q4 2024</i>
2	<i>Grow Email Subscriber List by 30% by December 2024</i>
3	<i>Enhance Social Media Engagement by 25% in 6 Months</i>
4	<i>Achieve a 15% Increase in Customer Retention Rate by Q2 2025</i>
5	<i>Boost Average Order Value by 10% by the End of 2024</i>



# Identify Key Performance Indicators

**Key Performance Indicator (KPI):** A quantifiable metric used to determine how effectively your key business objectives are being met. Ensure that the specific metric is clearly identified.

1	<i>Monthly sales revenue, conversion rate, and average order value</i>
2	<i>Number of new subscribers, email open rates, and click-through rates.</i>
3	<i>Engagement rate, number of followers, and reach.</i>
4	<i>Customer retention rate, repeat purchase rate, and Net Promoter Score (NPS).</i>
5	<i>Average order value, upsell/cross-sell rate, and number of items per order.</i>



# Part Two: A/B Testing Proposal

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# A/B Testing Proposal: KPI, Variable, and Hypothesis

## KPI used as basis for the A/B test

*Average Order Value (AOV)*

## Variable that will have an impact on the KPI

*Free Shipping Threshold*

## Hypothesis for your A/B Test

**Null Hypothesis (H0):** *Implementing a free shipping threshold has no effect on the Average Order Value.*

**Alternative Hypothesis (H1):** *Implementing a free shipping threshold increases the Average Order Value because customers are motivated to spend more to avoid shipping fees.*

**Reason for Choosing the Variable:** *Implementing a free shipping threshold is a popular strategy to encourage customers to add more items to their cart to qualify for free shipping, potentially increasing the Average Order Value.*

# A/B Testing Proposal: Details and results



## Details of the A/B test

<b>Variations being tested:</b>	<b>Control Group (A):</b> Customers see the current shipping policy with no free shipping threshold. <b>Current Version (Control):</b> The current version of the variable has no free shipping threshold. Customers pay shipping fees regardless of the order amount.
	<b>Test Group (B):</b> Customers see a new shipping policy where free shipping is offered for orders over \$50.
	<b>Variation (Test):</b> The variation introduces a free shipping threshold, where customers receive free shipping if their order total exceeds \$50.
<b>User groups:</b>	Users will be randomly split into two groups using the website's A/B testing tool.
	<b>Control Group (A):</b> 50% of the website visitors will experience the current shipping policy.
	<b>Test Group (B):</b> 50% of the website visitors will experience the new shipping policy with a \$50 free shipping threshold.
<b>Data collection tool:</b>	The data will be collected using Google Analytics, which tracks e-commerce metrics and provides insights into user behavior and purchase patterns.
<b>Length of the test:</b>	The test will run for 4 weeks to ensure a sufficient amount of data is collected for statistical significance.

## Describe how you would determine the results of the A/B test

*To determine the results of the A/B test, I would use visual tools like conversion rate graphs and AOV charts provided by an A/B testing platform like Google Optimize. If the test group's AOV consistently shows a noticeable increase over the control group without negatively impacting the conversion rate, the free shipping threshold strategy would be deemed effective. The best result would be a higher AOV in the test group while maintaining or improving the conversion rate.*



# Part Three: Data Exploration

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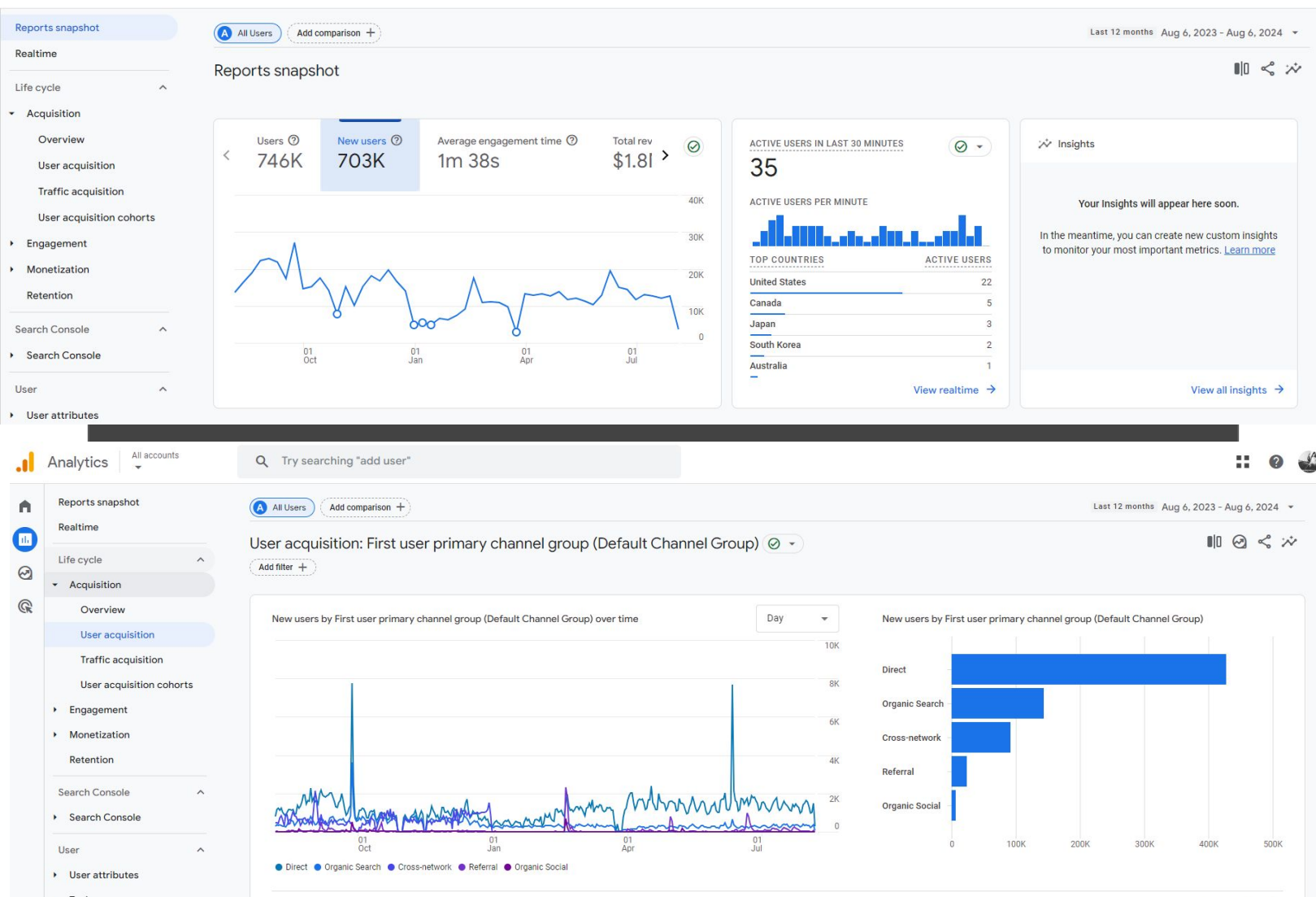


# Reports Snapshot

From the Reports Snapshot, select a twelve month time period you would like to explore.

Ensure that the following are visible in the screenshot:

- Timeframe
- New users
- Axis values



# Reports Snapshot



Which month had the most new users?

*september*

Which month had the fewest new users?

*january*

Write some ideas why certain trends are associated with these specific months?

Higher Number of New Users:

1. Seasonal Promotions: Major sales events or holiday promotions can attract more new users.
2. Marketing Campaigns: Successful advertising or promotional campaigns drive higher traffic.
3. Product Launches: New product introductions can lead to spikes in new users.
4. Seasonal Trends: Certain times of the year naturally generate more interest (e.g., holiday season).
5. Media Coverage: Positive press or media features can increase new visitors.

Lower Number of New Users:

1. Seasonal Slumps: Natural drops in traffic during certain months (e.g., summer vacations).
2. Reduced Marketing: Lower marketing efforts or budget cuts can lead to fewer new users.
3. Technical Issues: Website outages or problems can affect user acquisition.
4. Competitive Factors: Aggressive promotions by competitors might reduce traffic.
5. Behavior Changes: Shifts in consumer behavior or interests can impact new user numbers.



# User Tech

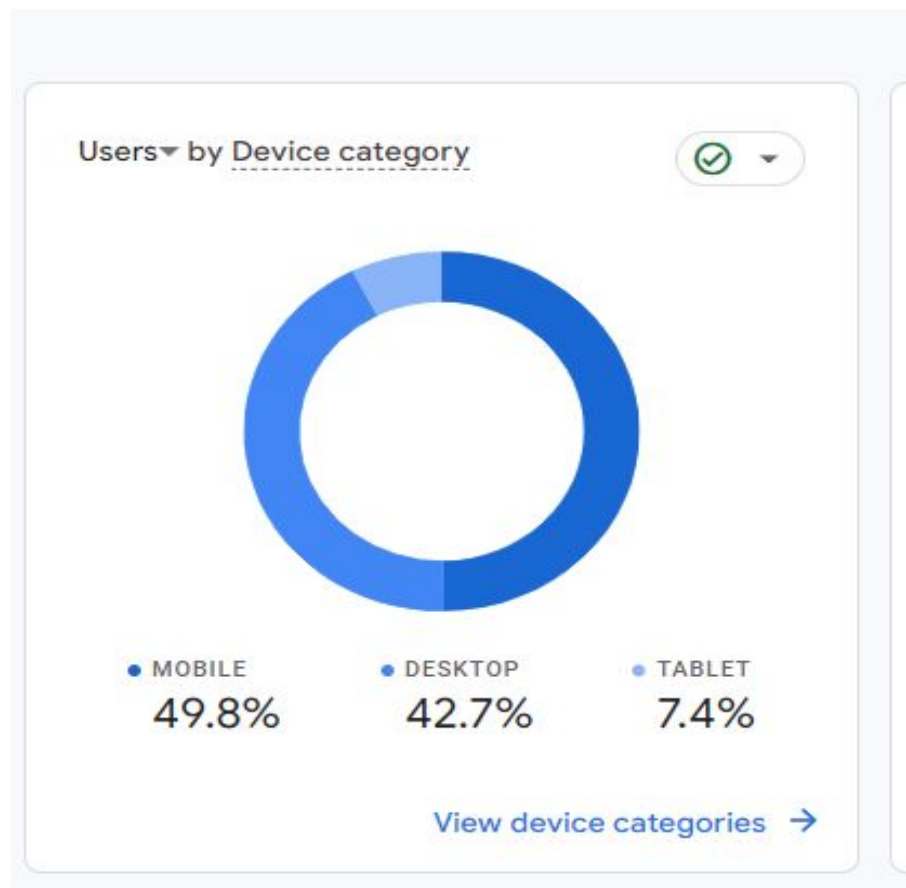
Please go into the User → Tech → Tech overview report for the following:

For the twelve month period you've chosen, provide a screenshot showing percentage chart (donut charts) of All Users that came from mobile, desktop, and tablet devices.

Ensure that the following are visible in the screenshot:

- Device Category
- Donut chart showing % breakdown by device

Note that the time frame selected does not need to be visible in the screenshot..





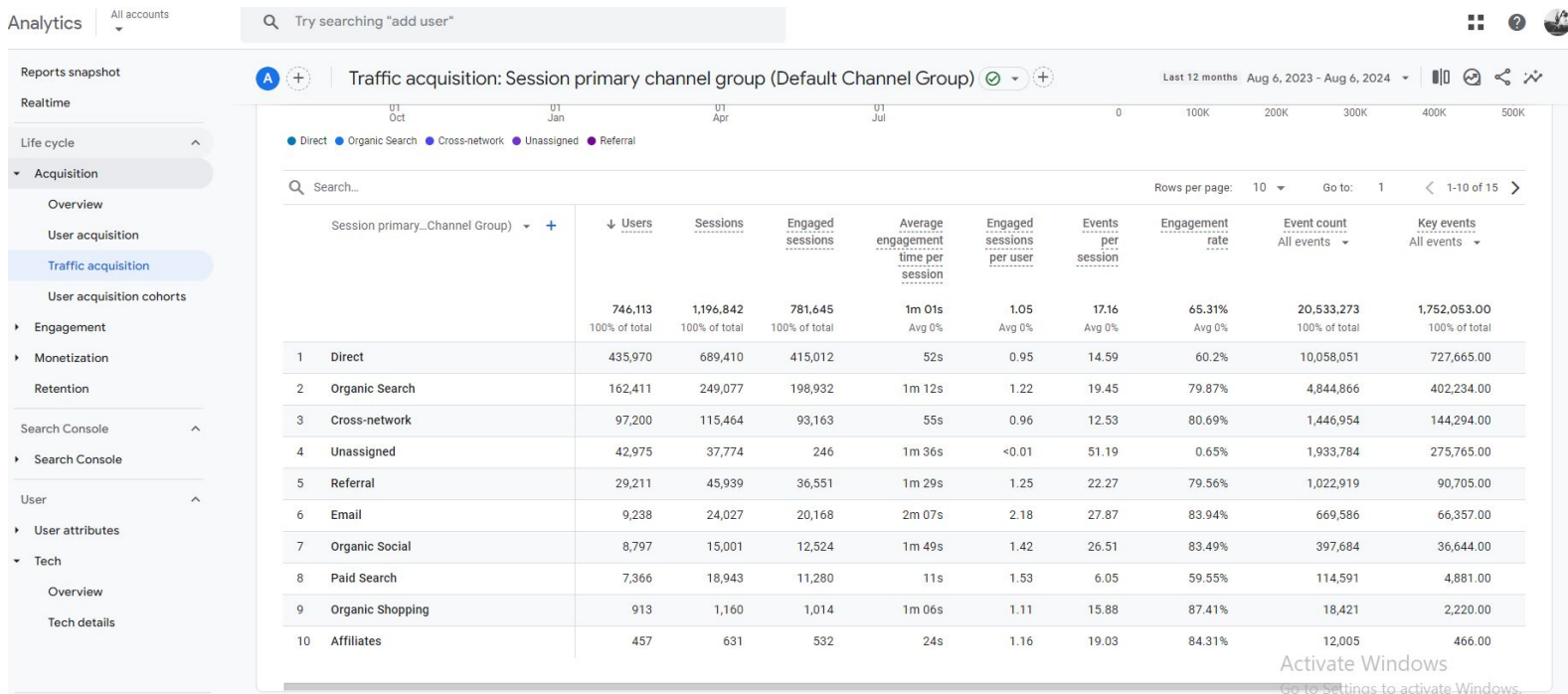
# User Acquisition

For this section, if you are using your own business's Google Analytics data but do not have eCommerce capabilities established, please use the Google Analytics demo data provided from the Google Merchandise store.

Take a screenshot that shows the Engagement rate of the different acquisition channels over a 12 month period.

Ensure that the following are visible in the screenshot:

- Channel group
- Users
- Engagement Rate





# User Acquisition

Which channel groups had the highest and lowest engagement rates?

*Highest :Paid shopping*

*Lowest: Unassigned*

Which channel groups had the highest and lowest total revenue?

*Highest : Direct*

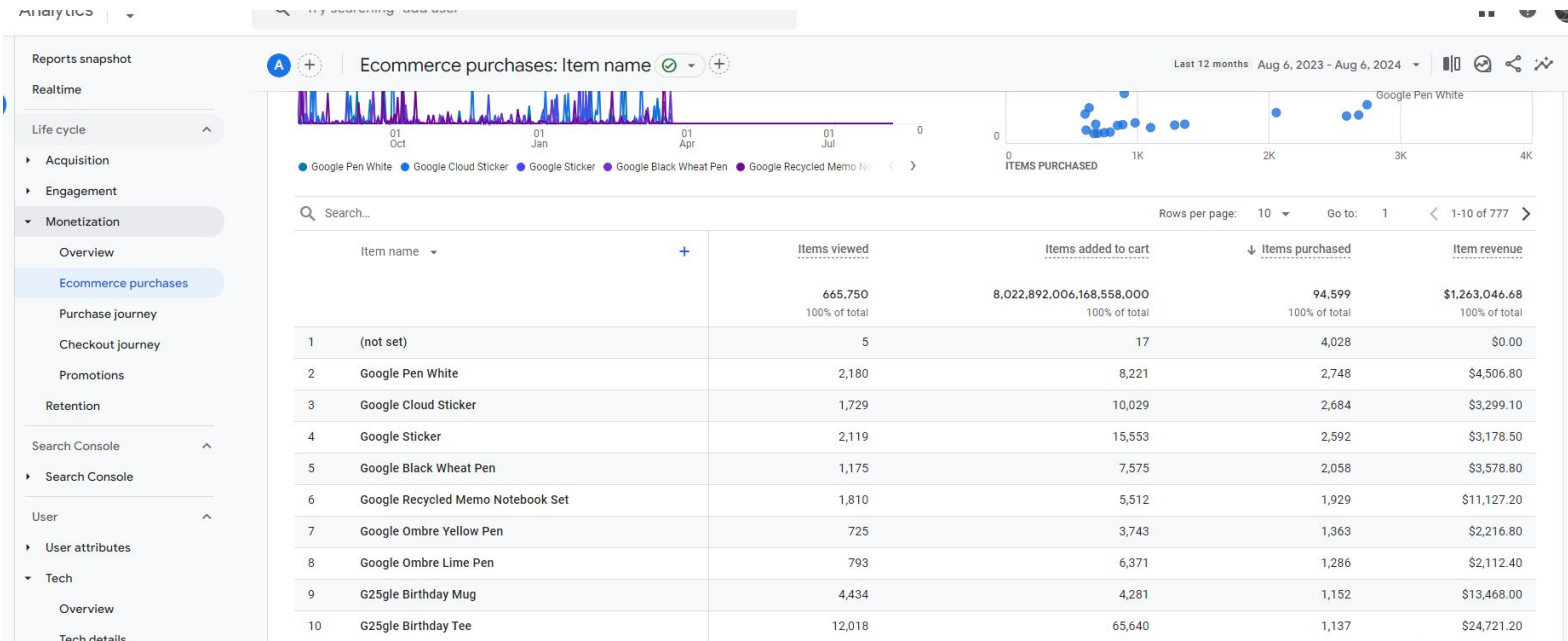
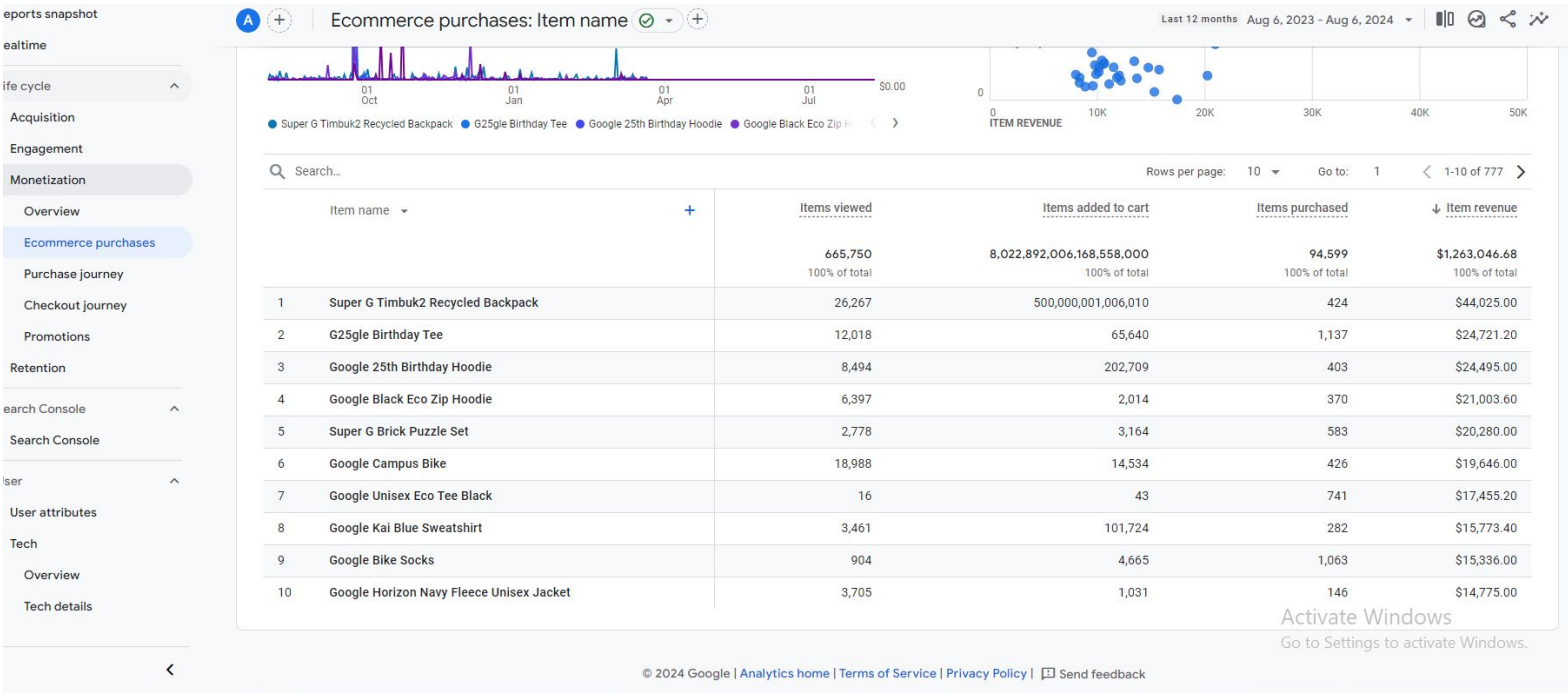
*Lowest: Affiliates, Display, Paid other, paid video*

*What do these metrics mean, based on your experience?*

*Based on the metrics, Paid Shopping having the highest engagement rate suggests that users acquired through paid shopping campaigns are more actively interacting with the site. Conversely, Unassigned having the lowest engagement rate indicates less effective or improperly tracked channels. For revenue, Direct channels generating the highest total revenue signifies strong brand loyalty and repeat visits, while Affiliates, Display, Paid Other, and Paid Video having the lowest revenue suggests these channels may need optimization to improve their conversion efficiency*



# Monetization





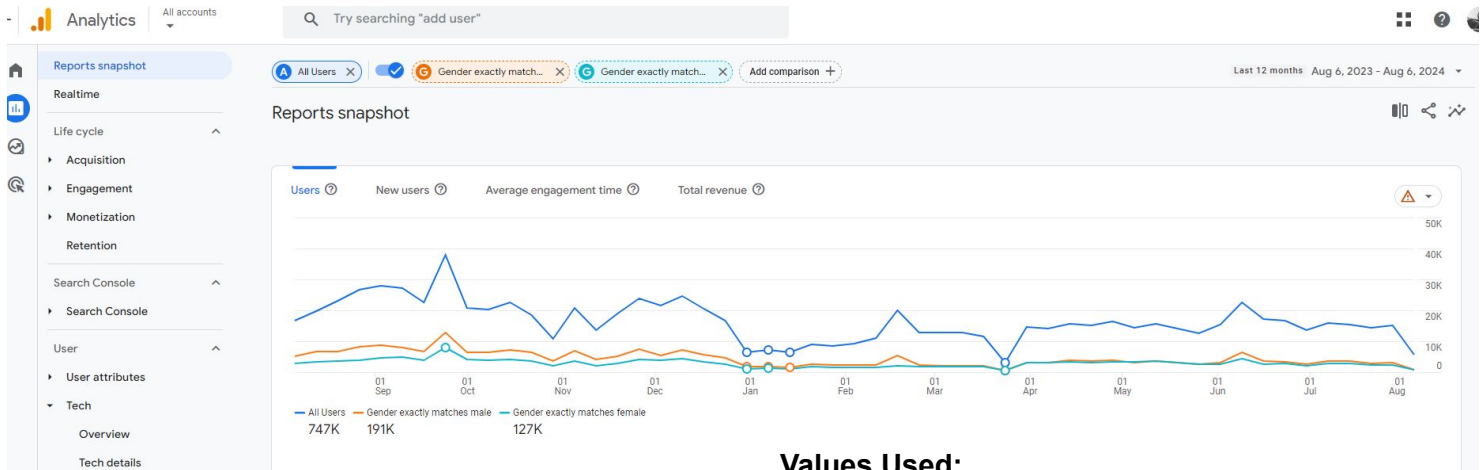
# Part Four: Segmentation

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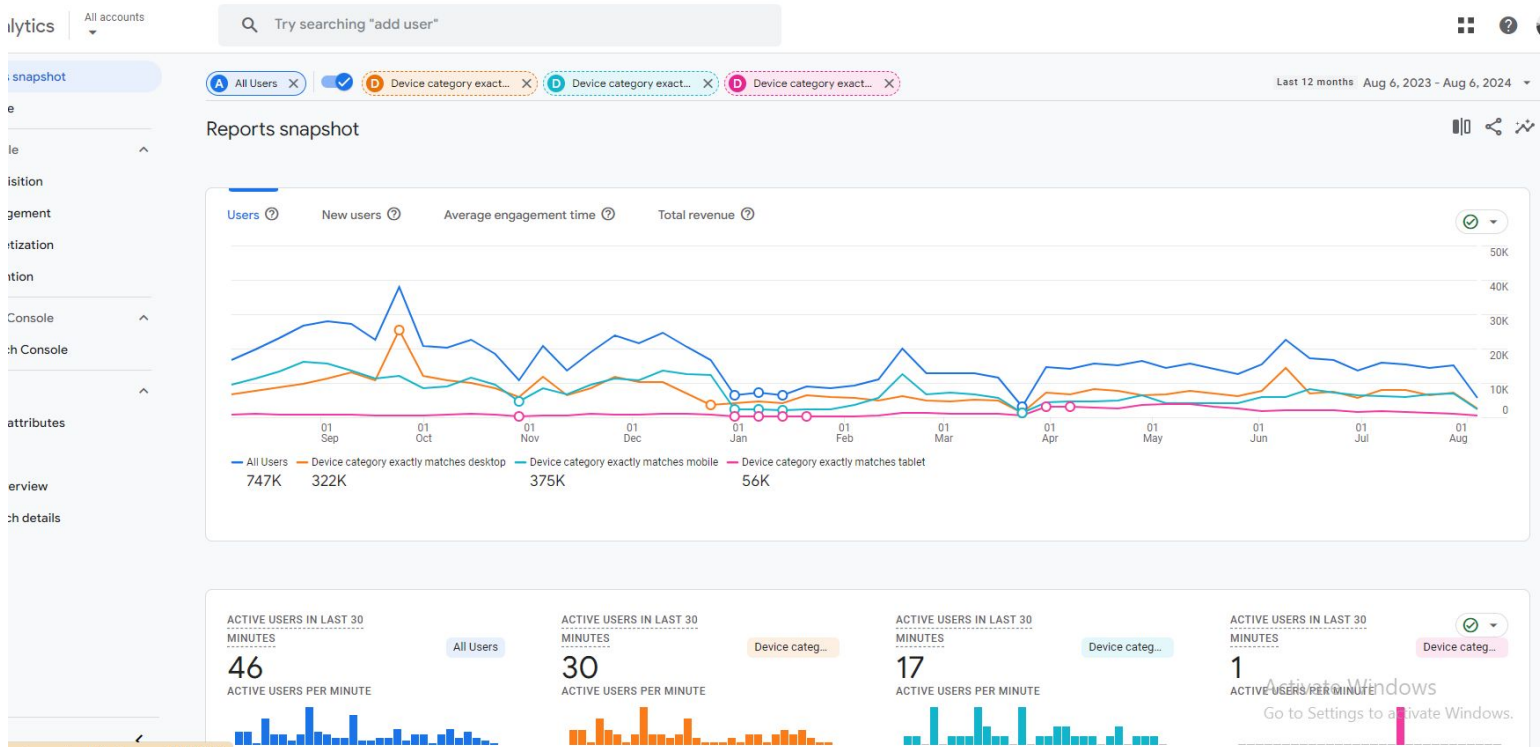


# Segmentation: Instructions



Values Used:

- Gender : male vs female



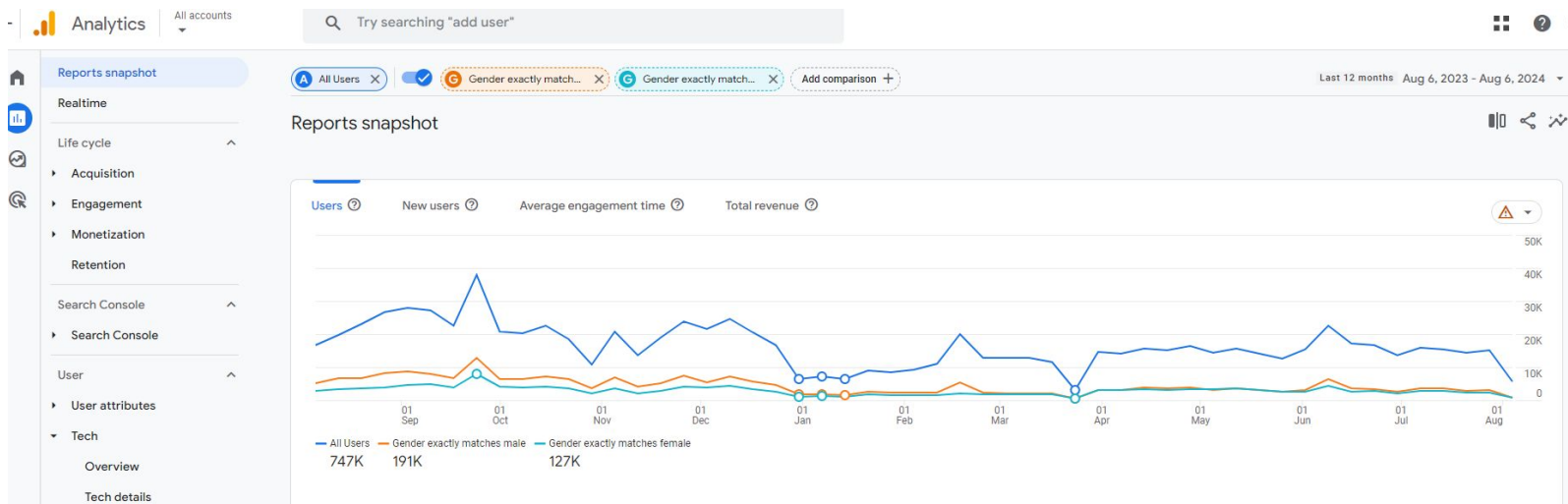
Values Used:

- Device category : desktop vs mobile vs tablet





# Audience Segment: Demographics

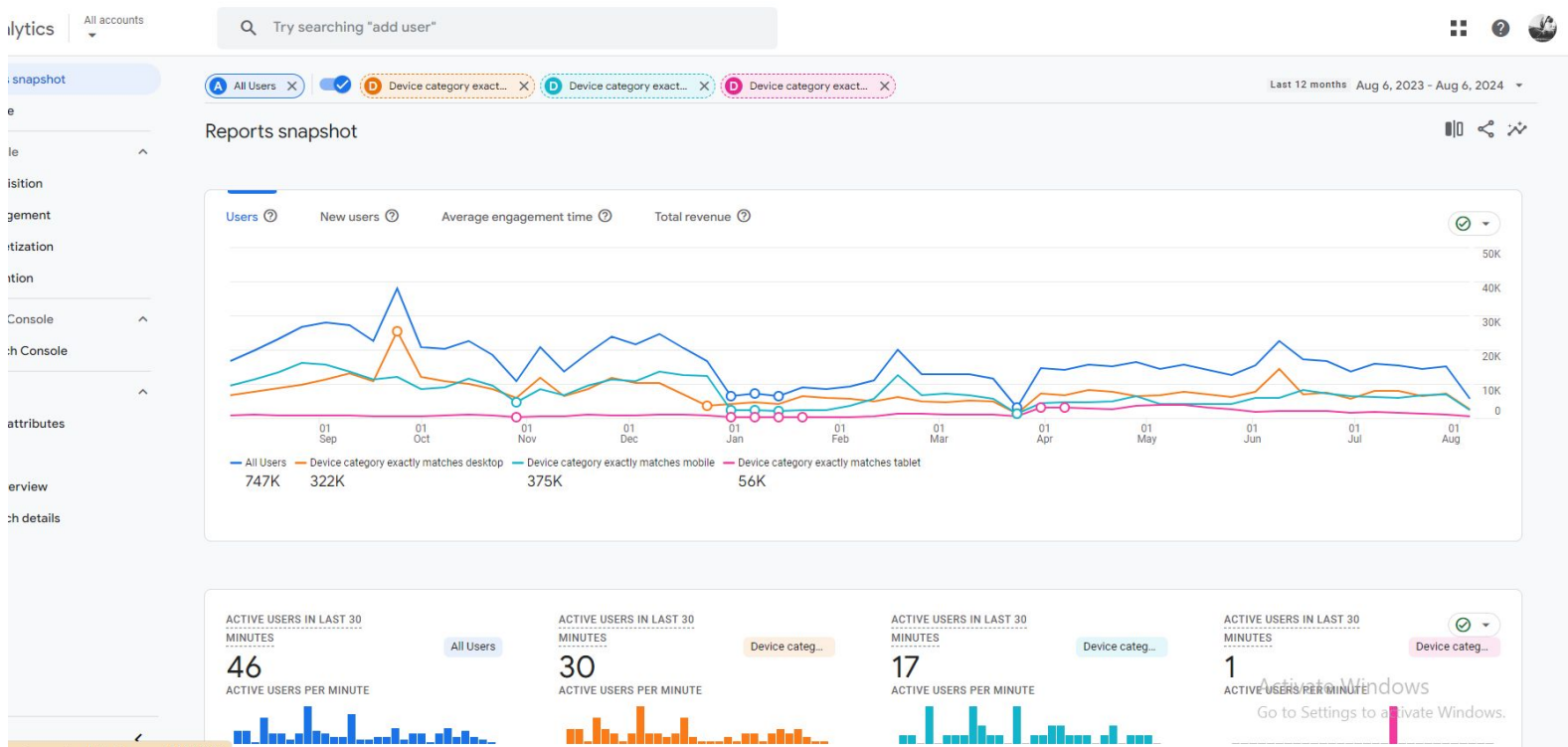


**Values used:**

*Gender exactly match male,  
Gender exactly match female*



# Audience Segment: Technology



Values used:

Device category exactly match desktop  
Device category exactly match mobile  
Device category exactly match tablet



# Part Five: Analysis and Suggestions

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# Google Merchandise Store data

You can find the results of the Google Merchandise Store campaigns below.

Campaign Name	Cost	Revenue	ROAS
Tech Trends: Discover the Latest Google Gear	\$5,000	\$3,000	0.6
Shop with Google: Unleash Your Digital Lifestyle	\$5,000	\$8,000	1.6
Google Gadgets Galore: Elevate Your Tech Game	\$5,000	\$8,000	1.6
Gear Up with Google: Your One-Stop Tech Shop	\$8,000	\$13,000	1.625
Google Merch Madness: Score Big on Tech Essentials	\$5,000	\$2,000	0.4
Unlock the Power of Google: Shop the Best in Tech	\$2,000	\$3,500	1.75
Totals	\$30,000	\$37,500	1.25

# Business Sales Growth



Based on the data provided, how might the campaigns be realigned and improved to potentially achieve a 20% YOY sales growth **without additional cost**? You can assume that the data will remain consistent over the projected time frame. Please reference specific data to support your answer, such as metrics and campaigns.

**You could get the answer by asking yourself: Which campaign would I spend less, and which would I spend more?**

*The goal is to reallocate the budget from less effective campaigns to more effective ones to maximize the overall return on ad spend (ROAS).*

## Strategy for Reallocation

### Reduce Spend on Low-Performing Campaigns:

1. **Tech Trends: Discover the Latest Google Gear**
  - Current Cost: \$5,000 → New Cost: \$2,000
  - Estimated Revenue: \$1,200 (ROAS 0.6)
2. **Google Merch Madness: Score Big on Tech Essentials**
  - Current Cost: \$5,000 → New Cost: \$2,000
  - Estimated Revenue: \$800 (ROAS 0.4)

### Increase Spend on High-Performing Campaigns:

1. **Shop with Google: Unleash Your Digital Lifestyle**
  - Current Cost: \$5,000 → New Cost: \$8,000
  - Estimated Revenue: \$12,800 (ROAS 1.6)
2. **Google Gadgets Galore: Elevate Your Tech Game**
  - Current Cost: \$5,000 → New Cost: \$8,000
  - Estimated Revenue: \$12,800 (ROAS 1.6)

### Revised Totals:

- **Total Cost:** \$30,000 (unchanged)
- **Total Revenue:** \$44,100
- **New Average ROAS:** 1.47

### Impact:

- **Current Revenue:** \$37,500
- **Revised Revenue:** \$44,100
- **Revenue Increase:** \$6,600 (17.6%)

To achieve the 20% YOY growth target, further optimization of high-performing campaigns can help close the gap of an additional \$900 in revenue



# eCommerce improvements

Looking at your website pages or the [Google Merchandise Store](#) website and current eCommerce experience, identify one change to the eCommerce UX and one additional eCommerce option you would recommend implementing.

*Example: One way to improve eCommerce capabilities would be to add the option of a digital wallet with the option to securely store and manage cards that have been used for payment, along with the option of using PayPal or Apple Pay.*

UX change:

## **Simplify the Checkout Process**

**Current Issue:** The checkout process involves multiple steps, which can lead to cart abandonment.

**Recommended Change:** Implement a one-page checkout system that consolidates all necessary information (shipping, billing, payment) onto a single page. This streamlines the process, reduces friction, and minimizes the chances of customers abandoning their carts. Additionally, offer guest checkout options to expedite the process for first-time users.

Other eCommerce change or addition:

## **Implement a Loyalty Program**

**Current Issue:** There is no visible incentive for repeat purchases.

**Recommended Option:** Introduce a loyalty program where customers earn points for each purchase. These points can be redeemed for discounts, free shipping, or exclusive merchandise. This encourages repeat business and increases customer retention.



# Technology

It is time for some exploration! You need to find 2 emerging marketing technologies that you could use in a technology stack. For each one, you need to describe why you would use that tool.

1

## *AI-Powered Customer Insights Platform*

*Tool Example: Clearsense*

- **Personalization:** Delivers tailored product recommendations and personalized email campaigns.
- **Predictive Analytics:** Anticipates customer behavior for better inventory and promotional planning.
- **Improved Customer Understanding:** Integrates data for a comprehensive view of customers, enhancing marketing relevance.

2

## *Conversational AI and Chatbots*

*Tool Example: Drift*

**24/7 Customer Support:** Provides real-time assistance and reduces human support workload.

**Lead Generation:** Engages visitors and qualifies leads efficiently.

**Enhanced Shopping Experience:** Offers interactive product recommendations and facilitates purchases through chatbots.