

# Marketing Data and Technology



Draw Insights from  
Marketing Data



# Part One: Setting Goals

---



# 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 total revenue by 20% by the next quarter</i>
2	<i>Improve average user engagement time by 20% within the next two months</i>
3	<i>Improve conversion rate by 30% by the next quarter</i>
4	<i>Increase Average Order Value by 15% by the end of the financial year</i>
5	<i>Enhance Customer Loyalty &amp; Retention by increasing our personalized discounts offering by 20% over the next 2 months.</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>Total Revenue made</i>
2	<i>Average engagement time</i>
3	<i>Conversion rate at checkout stage</i>
4	<i>Average Order Value</i>
5	<i>Number of email sign ups to the rewards program</i>



# Part Two: A/B Testing Proposal

---



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

<b>KPI used as basis for the A/B test</b>
<i>Conversion rate at the checkout stage</i>
<b>Variable that will have an impact on the KPI</b>
<i>Offering guest check-out options</i>
<b>Hypothesis for your A/B Test</b>
<i>Offering a guest check-out option could make it easier for customers to complete their purchases and thus lower the cart abandonment rate.</i>



# A/B Testing Proposal: Details and results

## Details of the A/B test

<b>Variations being tested:</b>	<i>Sign in to purchase</i>
	<i>Guest check-out option</i>
<b>User groups:</b>	<i>Normal users v Users who will get to use the guest check-out option</i>
<b>Data collection tool:</b>	<i>Google Analytics</i>
<b>Length of the test:</b>	<i>2 months</i>

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

*To evaluate the results of the A/B Test, I would look at the number of conversions at the checkout stage from each of the two groups and see whether the cart abandonment rate drops. The lower the cart abandonment rate means there are more conversions, more sales, more revenue.*



# Part Three: Data Exploration

---



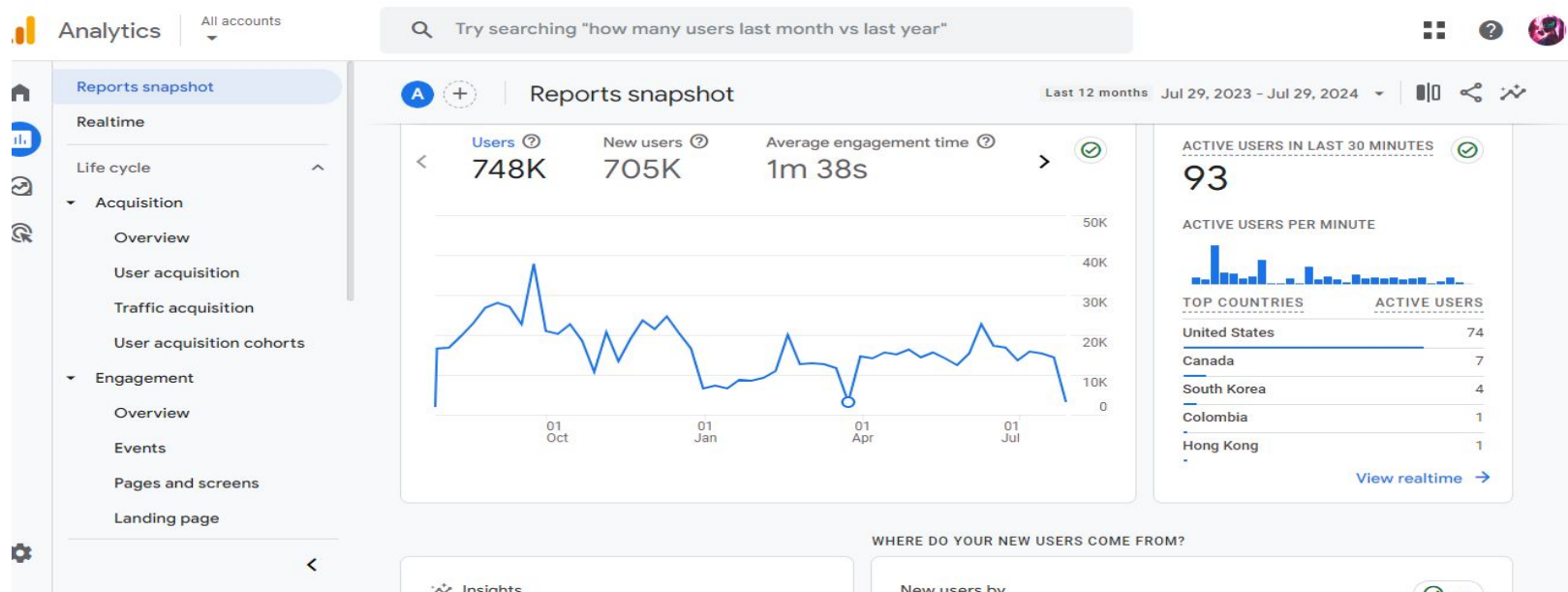


# Reports Snapshot

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 2023*

Which month had the fewest new users?

*April 2024*

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

*The ending months from September going onwards are filled with lots of festivities such as Halloween, Christmas hence the frequent spikes in new users whereas There was not much activity in April and thus lower new users.*



# User Tech

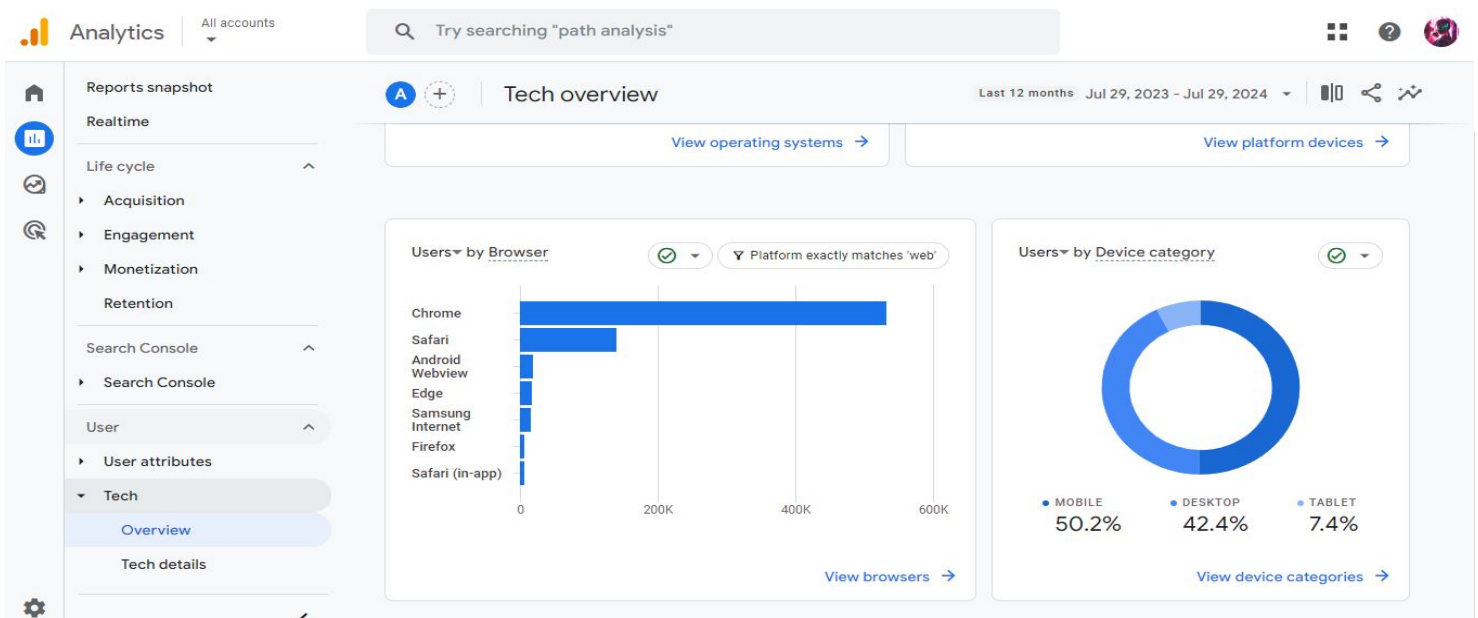
Please go into the User → Tech → Tech overview report for the following:

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

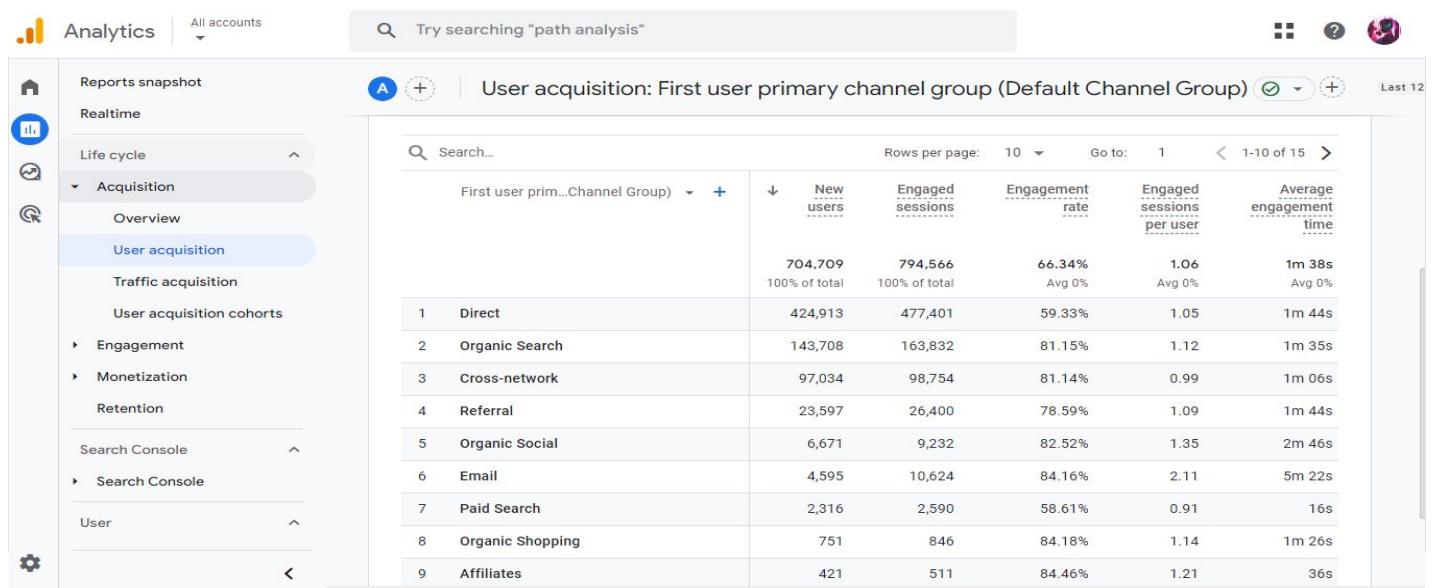
**For this section, if you are using your own business's Google Analytics data but do not have eCommerce capabilities established, please use the Google Analytics demo data provided from the Google Merchandise store.**

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

Note that the time frame selected does not need to be visible in the screenshot, but will be reflected by the number of users.



The screenshot displays the Google Analytics 'User acquisition' report. The left sidebar shows the navigation menu with 'Acquisition' expanded and 'User acquisition' selected. The main content area shows a table of acquisition channels. The table includes columns for 'New users', 'Engaged sessions', 'Engagement rate', 'Engaged sessions per user', and 'Average engagement time'. The data is sorted by 'New users' in descending order.

		New users	Engaged sessions	Engagement rate	Engaged sessions per user	Average engagement time
	First user prim...Channel Group)	704,709	794,566	66.34%	1.06	1m 38s
		100% of total	100% of total	Avg 0%	Avg 0%	Avg 0%
1	Direct	424,913	477,401	59.33%	1.05	1m 44s
2	Organic Search	143,708	163,832	81.15%	1.12	1m 35s
3	Cross-network	97,034	98,754	81.14%	0.99	1m 06s
4	Referral	23,597	26,400	78.59%	1.09	1m 44s
5	Organic Social	6,671	9,232	82.52%	1.35	2m 46s
6	Email	4,595	10,624	84.16%	2.11	5m 22s
7	Paid Search	2,316	2,590	58.61%	0.91	16s
8	Organic Shopping	751	846	84.18%	1.14	1m 26s
9	Affiliates	421	511	84.46%	1.21	36s



# User Acquisition

Which channel groups had the highest and lowest engagement rates?

*Highest- Affiliates*

*Lowest- Paid other*

Which channel groups had the highest and lowest total revenue?

*Highest-Direct*

*Lowest- Paid other*

What do these metrics mean, based on your experience?

*Engagement rates mean what number of people interacted with your company's offering be it on your landing page whereas total revenue indicates which group converted to become customers who paid and bought products from your store.*



# Monetization

**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.**

During the twelve month period you've selected, provide a screenshot that shows the Item name that contributed the highest number of unique purchases and the item name that was responsible for the largest percentage of revenue? (Screenshot(s) only; no annotation required.)

Ensure that the following are visible in the screenshot:

- Item names
- Number of items purchased
- Item revenue

The screenshot displays the Google Analytics 'Ecommerce purchases: Item name' report. The left sidebar shows the navigation menu with 'Monetization' and 'Ecommerce purchases' selected. The main content area shows a table of items with columns for Item name, Items viewed, Items added to cart, Items purchased, and Item revenue. The table is sorted by Item revenue in descending order. The top item is 'Super G Timbuk2 Recycled Backpack' with 450 purchases and \$46,700.00 in revenue. The bottom item is 'Google Eco Tee Black' with 0 purchases and \$0.00 in revenue.

	Item name	Items viewed	Items added to cart	Items purchased	Item revenue
		685,447 100% of total	8,022,918,599,269,533,000 100% of total	96,449 100% of total	\$1,294,862.47 100% of total
1	Super G Timbuk2 Recycled Backpack	27,349	500,000,001,006,124	450	\$46,700.00
2	Google Campus Bike	19,521	14,672	433	\$19,987.00
3	G25gle Birthday Tee	12,018	65,640	1,137	\$24,721.20
4	Google Sensory Support Event Kit	10,795	593	78	\$3,667.50
5	Google 25th Birthday Hoodie	8,494	202,709	403	\$24,495.00
6	Android Classic Collectible	8,367	2,505	184	\$2,835.20
7	Chrome Dino Warm and Cozy Accessory Pack	7,449	1,242	209	\$2,394.00
8	Google Black Eco Zip Hoodie	6,527	2,038	376	\$21,362.40
9	Google Recycled Black Backpack	6,524	1,012	58	\$4,320.00
10	Google Eco Tee Black	6,139	6,103	0	\$0.00

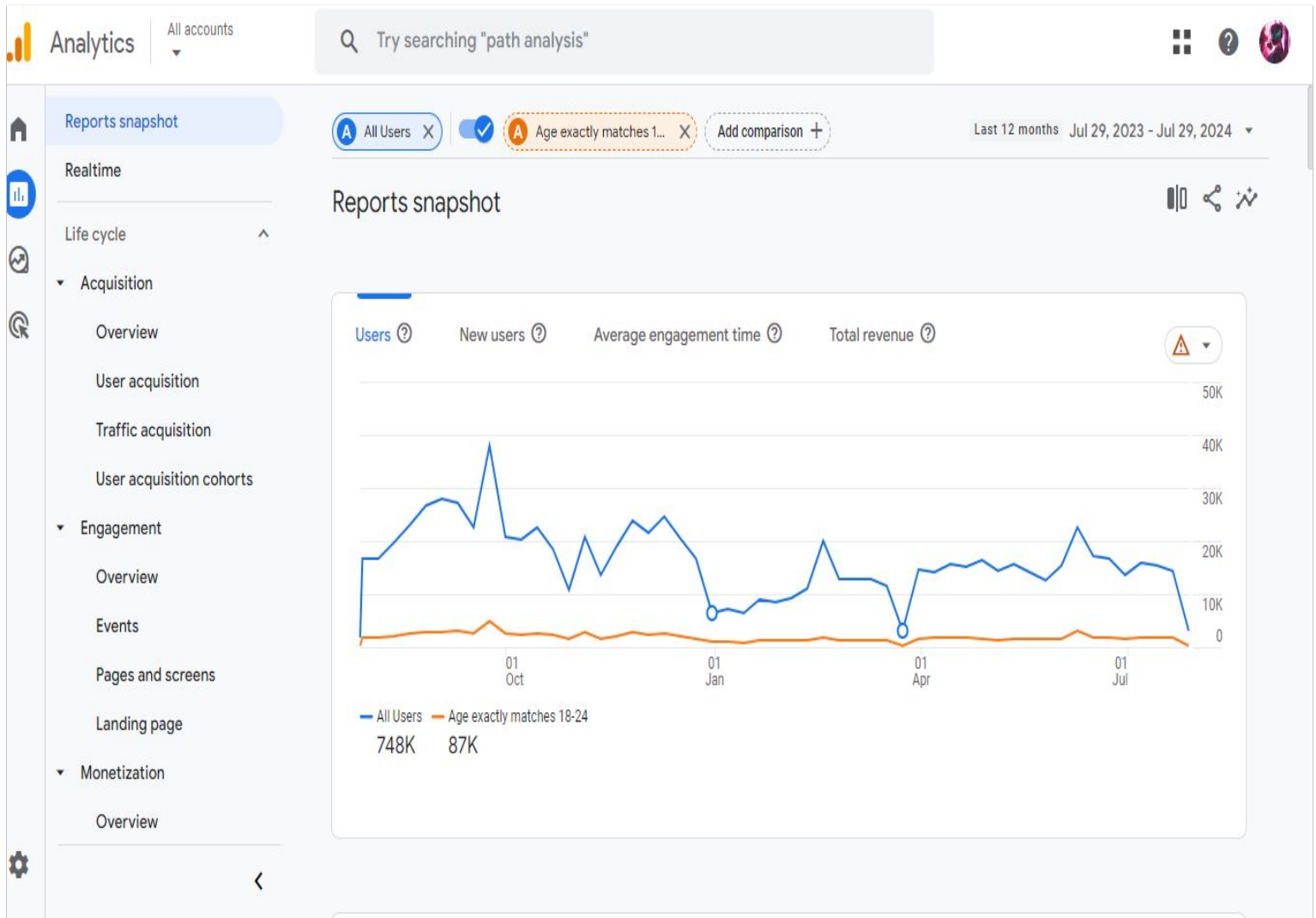


# Part Four: Segmentation

---



# Audience Segment: Demographics



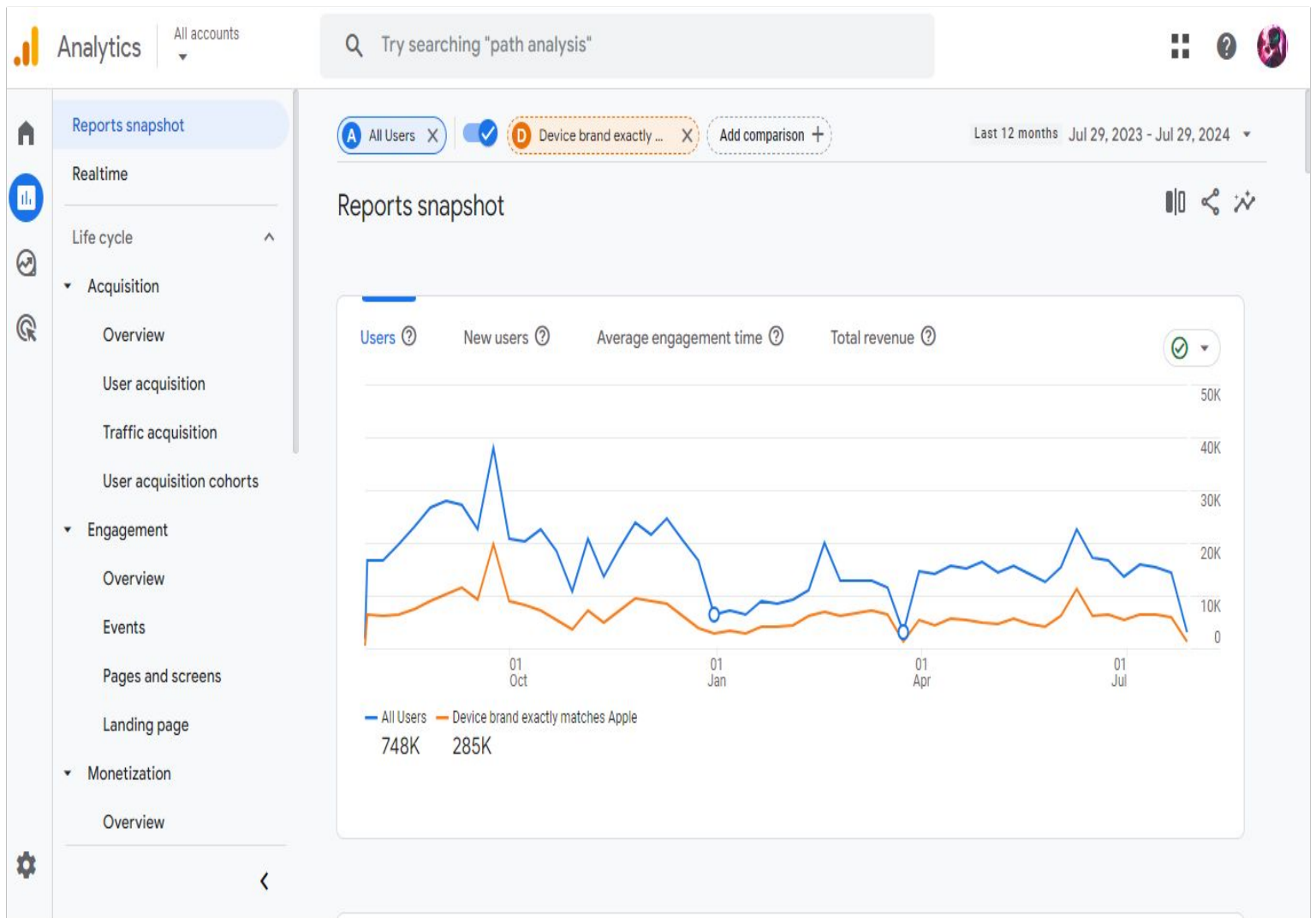
## Values used:

Write the values used to create the segment here, for example "Age exactly matches 18-24"





# Audience Segment: Technology



**Values used:**

*Write the values used to create the segment here*



# Part Five: Analysis and Suggestions

---



# 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	



# 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?**

*I would optimize the high converting campaigns such as the direct and organic search while I would plow back and spend less on Affiliates and Paid other as they brought in 0 \$ 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:

*I would implement a Guest Checkout Option as it would remove the need for new users to sign up in order to have their orders processed which reduces friction and thus smoothens the checkout experience. P*

Other eCommerce change or addition: I would also add multiple payment options in order to cater for any customer's preferred mode of payment.



# 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 chatbots*

*With the advent of current chatbots being powered by Machine Learning and Natural Language Processing, they are able to decipher customer queries and thus be able to effectively respond to them almost instantaneously enhancing customer satisfaction while reducing support costs.*

2 *Voice search optimization ( Alexa, Siri, Google Assistant)*

*Being able to incorporate & optimize this technology will help you tap into a market of users who use virtual assistants like Siri, Google Assistant, or Amazon Alexa to make voice-based queries. You will also be able to tap into the market of those who use text to speech such as the visually impaired as they will be able to navigate through your business through the virtual assistants.*