Marketing Data and Technology

Draw Insights from Marketing Data

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Part One: Setting Goals

Identify Key Business Objectives

	Key Business Objectives:
1	*To identify the top three trends or patterns within the first two months by analyzing data of the most purchased/searched for products.*
2	*To understand what words or phrases users use in their first search to help create better keywords by the first month.*
3	*To identify how much time users spend on the website within the first two months, and at which stage they exit, to determine what to improve in the website.*
4	*To identify which items or services sell out the most during the first trend, to help determine the amount of stock produced and what to focus on in advertising by the first three months.*

Identify Key Performance Indicators

Key Performance Indicators (KPI):	
1	*Traffic development in the website and total time spent.*
2	*Measuring bounce rates.*
3	*Identifying what are the most searched phrases.*
4	*Determining the gender and age of the users.*

Part Two:
A/B Testing Proposal

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

KPI used as the basis for an A/B Test:

Traffic development in the website and total time spent.

Identify a variable that will have an impact on the KPI and metric

Website design and content.

Determine a hypothesis for your A/B Test. Your hypothesis should include the variable you are testing and your predicted outcome.

The users do not find the products their searching for very easily when using the website. Hence, enhancing search filters to ones that are more specific will help provide results closer to what users want.

A/B Testing Proposal: Testing Process

Describe the steps you would take to perform the A/B test.

Firstly, we'll begin with searching for a product that may give us multiple results or meaning, like "top". We'll then verify if we got correct results or not. We should add a filter button in the search bar that helps us choose our filters. User must be able to use filter option before searching to reduce time waste.

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

After choosing filters and searching, the users must be able to find the product their looking for in the first page of the result. If the users find the products in the first result page, this measn the test was successful.

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

Users	Event count	Conversions	New users	
618K	25M	1.2M	579K	⚠ ▼
-	-	-	-	

25K

20K

15K

10K

5K

0

01
Jan

01
Apr

01
Jul

01
Oct

— Custom ▪ ▪ Preceding period

Jan 1 - Dec 31, 2022 ▼

View reports snapshot →

Reports Snapshot

Which month had the most new users, and which month had the fewest new users?

Most new users: December.

Fewest new users: June.

Do you have any ideas why certain trends are associated with these specific months?
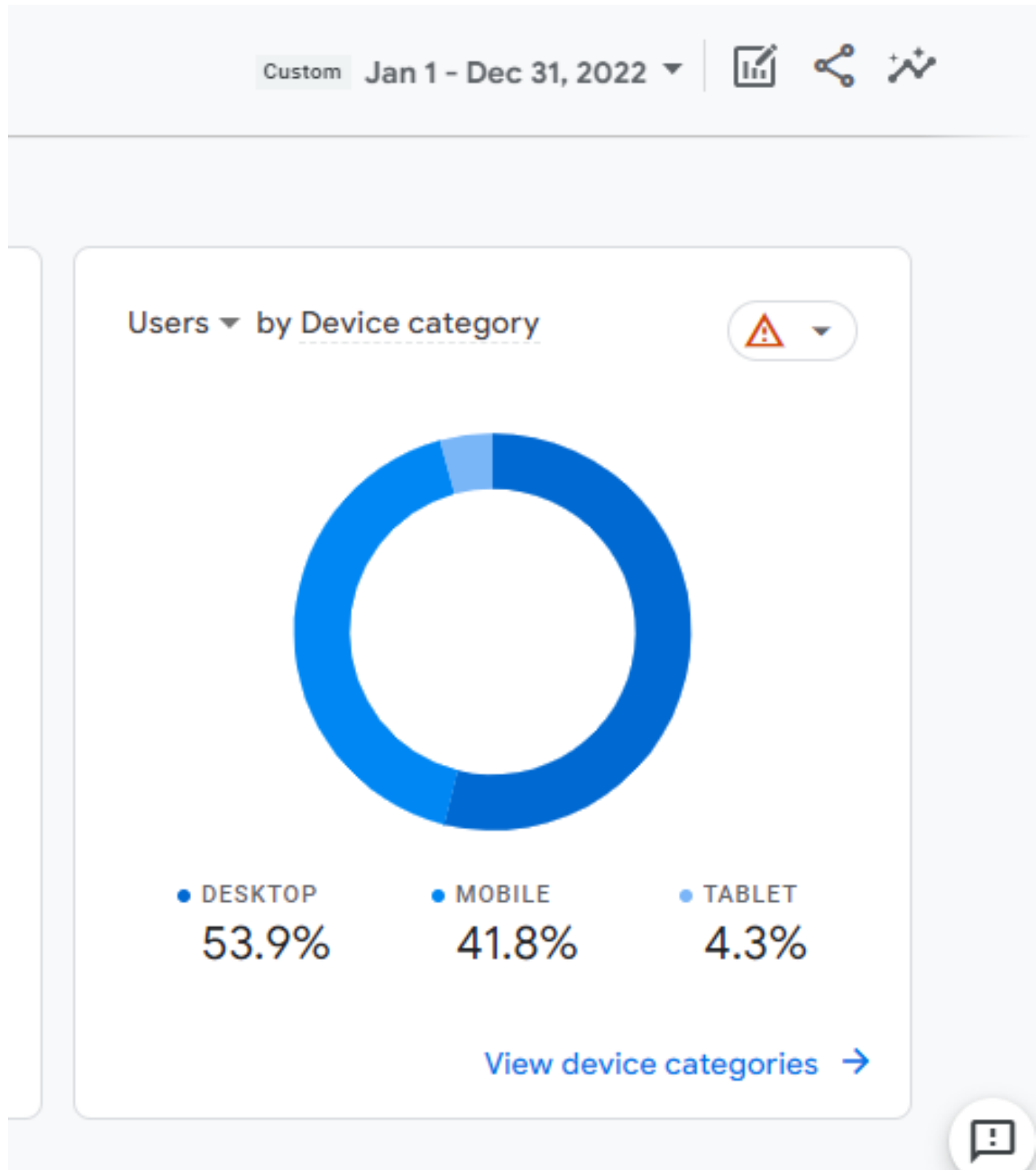
Because December is the month where Christmas happens, people usually buy more during that period, for themselves and for others as presents. It's also the season where most brands usually make attractive offer and discounts. Furthermore, people start to shop for winter as well.

Insert your notes about the screenshot on the previous page here.

On the 7th of December 2022, there was a 201.8% increase in sales. The number of actual users exceeded the number of expected users. This may be for the reasons mentioned above.
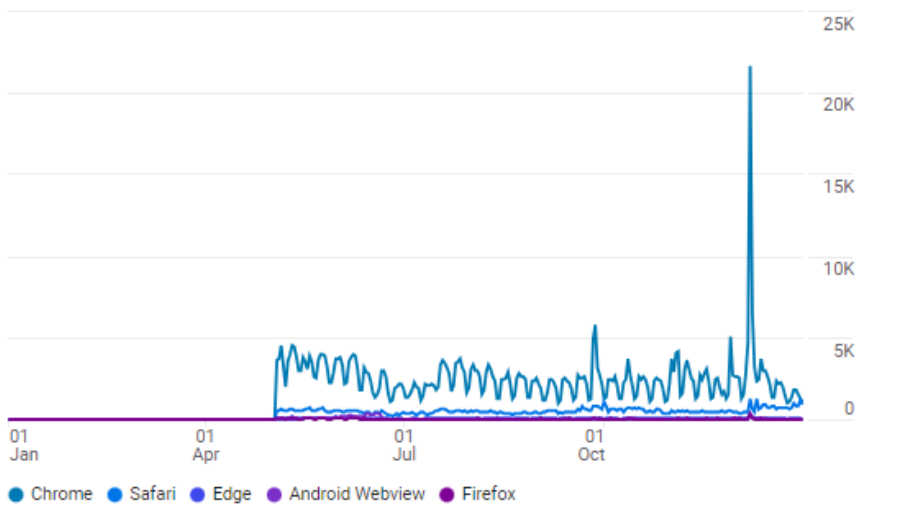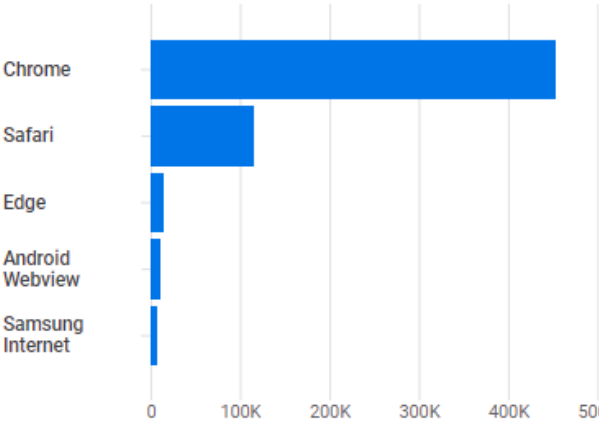
User Tech

Custom Jan 1 – Dec 31, 2022 ▼

Users ▼ by Device category

DESKTOP
53.9%

MOBILE
41.8%

TABLET
4.3%

View device categories →

User Acquisition

Users by Browser over time

Users by Browser

● Chrome ● Safari ● Edge ● Android Webview ● Firefox

Browser ▾ +	↓ Users	New users	Engaged sessions	Engagement rate	Engaged sessions per user	Average engagement time
	618,024 100% of total	579,077 100% of total	617,852 100% of total	63.09% Avg 0%	1.00 Avg 0%	2m 14s Avg 0%
1 Chrome	452,701	422,351	497,594	66.14%	1.10	2m 39s
2 Safari	115,913	111,051	82,948	54.7%	0.72	1m 04s
3 Edge	14,865	12,842	14,336	61.91%	0.96	1m 46s
4 Android Webview	10,572	9,773	7,193	58.66%	0.68	0m 57s
5 Samsung Internet	7,795	7,474	4,942	50.56%	0.63	0m 47s
6 Firefox	7,402	6,637	6,753	64.59%	0.91	1m 46s
7 Safari (in-app)	3,229	3,148	1,989	54.05%	0.62	0m 40s
8 Opera	1,881	1,729	1,681	61.4%	0.89	1m 11s
9 Amazon Silk	1,527	1,516	678	33.9%	0.44	0m 23s
10 UC Browser	1,386	1,371	776	54%	0.56	0m 12s

Browser ▾ +	Engagement rate	Engaged sessions per user	Average engagement time	Event count All events ▾	Conversions All events ▾	Total revenue
	63.09% Avg 0%	1.00 Avg 0%	2m 14s Avg 0%	24,528,230 100% of total	1,244,126.00 100% of total	$1,894,011.73 100% of total
1 Chrome	66.14%	1.10	2m 39s	20,044,985	899,576.00	$1,808,482.41
2 Safari	54.7%	0.72	1m 04s	2,257,226	169,599.00	$62,400.58
3 Edge	61.91%	0.96	1m 46s	552,807	23,534.00	$13,201.88
4 Android Webview	58.66%	0.68	0m 57s	200,071	11,842.00	$1,532.56
5 Samsung Internet	50.56%	0.63	0m 47s	113,397	9,526.00	$503.75
6 Firefox	64.59%	0.91	1m 46s	266,346	10,985.00	$7,587.55

User Acquisition

During the twelve month period you've selected, which channel groups had the highest and lowest engagement rates and the highest and lowest total revenue?

Highest engagement: Google Chrome.

Lowest engagement: Amazon Silk.

Highest revenue: Google Chrome.

Lowest revenue: Amazon Silk and UC Browser.

What do these metrics mean, based on your experience?

This means that the content shown to users is more relevant to them, and closer to what they're searching for. And most probably, what they want is in the first page of the results.
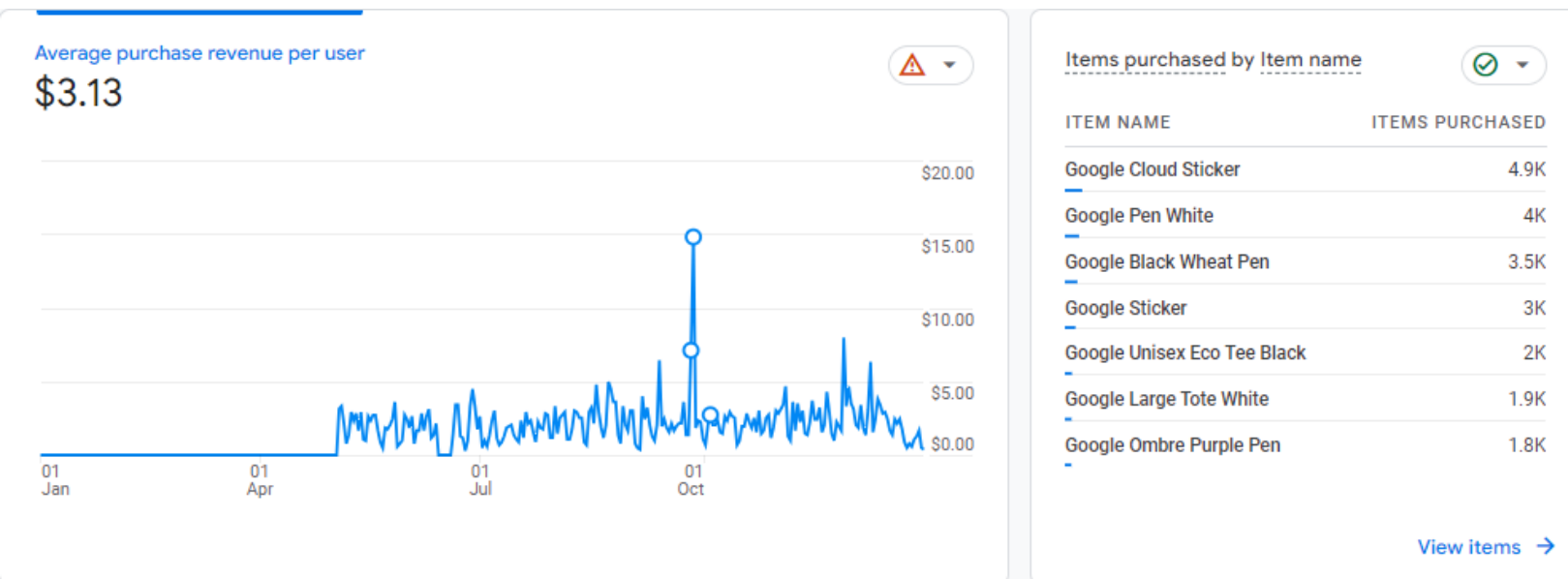
Monetization

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

Average purchase revenue per user

$3.13

| $20.00 |
| $15.00 |
| $10.00 |
| $5.00 |
| $0.00 |

01 Jan | 01 Apr | 01 Jul | 01 Oct

Items purchased by Item name

ITEM NAME	ITEMS PURCHASED
Google Cloud Sticker	4.9K
Google Pen White	4K
Google Black Wheat Pen	3.5K
Google Sticker	3K
Google Unisex Eco Tee Black	2K
Google Large Tote White	1.9K
Google Ombre Purple Pen	1.8K

View items →

Part Four: Segmentation

Audience Segment: Demographics

Users by Country:

Users ▾ by Country   ⚠ ▾

COUNTRY	USERS
United States	333K
China	57K
India	49K
Canada	31K
Japan	14K
Taiwan	10K
South Korea	9.1K

Users by Country over time
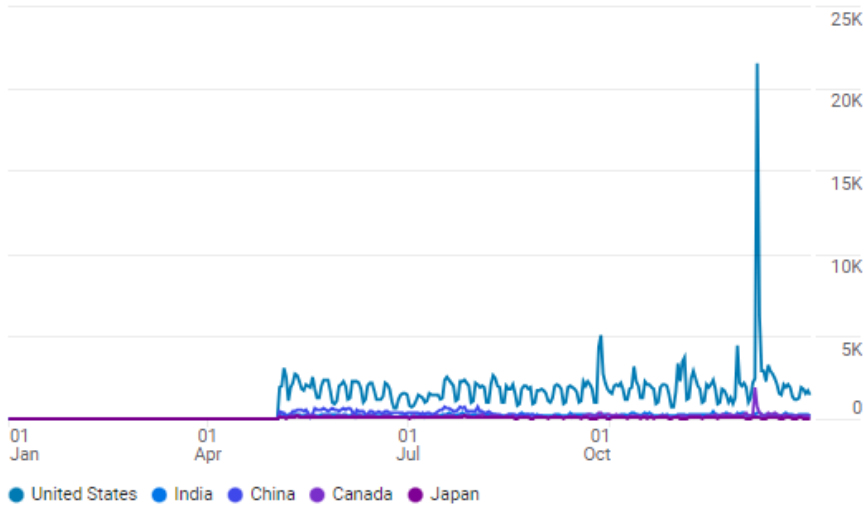
Users by Country
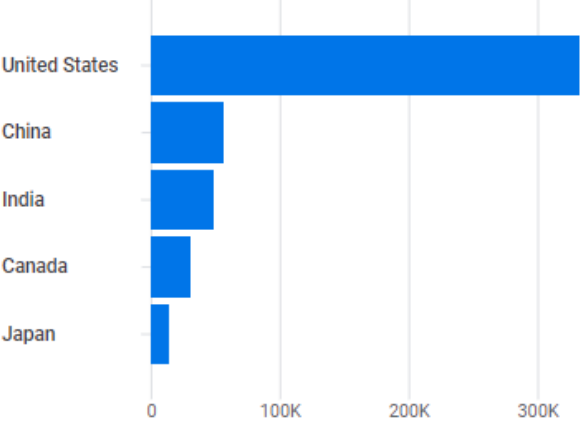
Audience Segment: Technology

User by Browser:
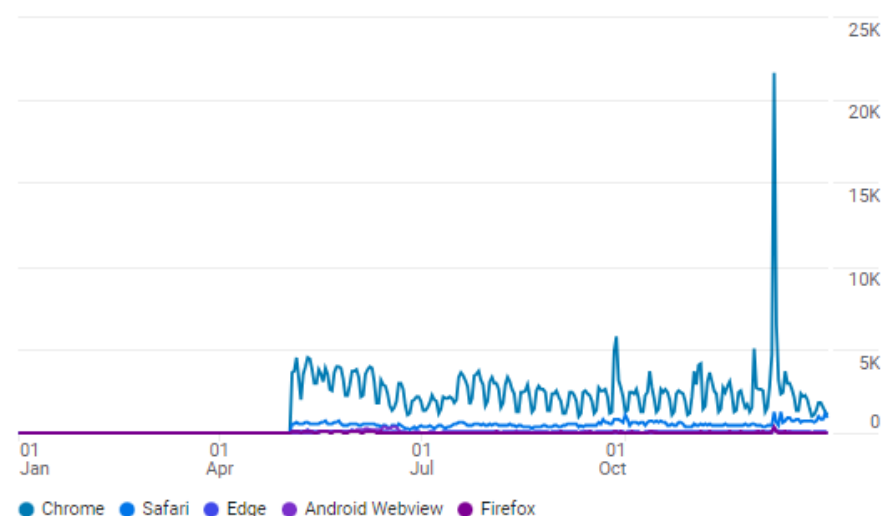
Users by Platform / device category

PLATFORM / DEVI...	USERS
web / desktop	335K
web / mobile	259K
web / tablet	27K
web / smart tv	82

View platform devices →

Users by Browser — Include Platform = Web

Chrome
Safari
Edge
Android Webview
Samsung Internet
Firefox
Safari (in-app)

0 100K 200K 300K 400K 500K
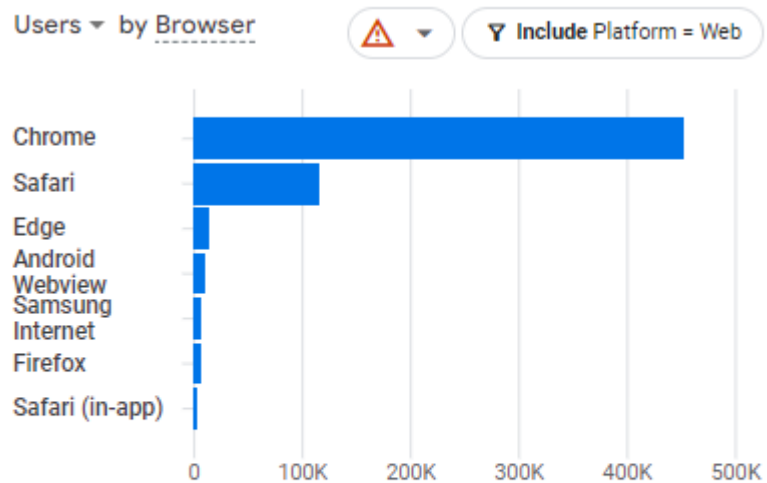
View browsers →

Users by Browser over time

25K
20K
15K
10K
5K
0

01 Jan   01 Apr   01 Jul   01 Oct

● Chrome ● Safari ● Edge ● Android Webview ● Firefox

Users by Browser

Chrome
Safari
Edge
Android Webview
Samsung Internet

0 100K 200K 300K 400K 500K
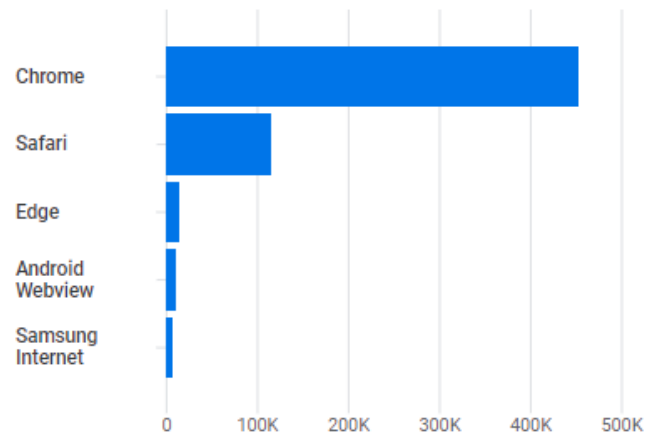
Part Five:
Analysis and Suggestions

Analysis and Suggestions: Business Sales Growth

Analyze your existing marketing campaigns to grow your business. In order to complete this section using your own data, you must have the required data (Campaign, Cost, Revenue, ROAS) for a minimum of two campaigns. If you do not have at least two campaigns or are missing some of the necessary data, you can use the [2021 GSMM Solar YouTube Ad Sales Funnel Campaigns Pitch Deck](#) to answer this question. You are also welcome to add additional data beyond what is specified.

If using your own data, complete the following table adding rows as necessary. If using the provided GSMM Pitch Deck, delete the table.

Analysis and Suggestions: Business Sales Growth

Based on the data and other information provided, how might the campaigns be realigned and improved to potentially achieve a 20% YOY sales growth? You can assume that the c\data will remain consistent over the projected time frame. Please reference specific data to support your answer like metrics and campaigns.

We can first begin by changing the keywords into better ones that users actually search for using Google Analytics. Furthermore, we can help update the landing pages regularly – based on the season for instance – to help engage more with users. Additionally, adding more languages will help ease the user journey, which will enhance their experience, and consequently, lead them to buy and increase sales.

Analysis and Suggestions: eCommerce

Now you will evaluate the current state of eCommerce for your business and how it might be improved.

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.

UX change: Besides putting the options above like new, shop by brand, etc.., adding a 'trending' button will help users quickly find trending products they've seen online.

Other eCommerce change or addition: A great way to help attract the user is to add more brands to buy from in the website. This will help target a bigger audience, as well as increase loyalty as this will make the user want to come back to the same website every time.

Analysis and Suggestions: Technology

Now you will look at your existing technology stack and make recommendations for the future. This should include at least two additional technologies that are not currently utilized, one of which is a new emerging technology.

If using your own business, provide both the existing technology stack and the recommended update which.

If you are not using your own business or do not currently have a technology stack, you can use the [GSMM 2021 Marketing Technology and Channels Spreadsheet](#) to answer this question or as a template to create your own.

1- Adding a chatbot to the technology stack will help users find answers to their questions quicker and this enhances their experience.

2- Another thing to add is to implement AI to the search. For example, the user can write the description of the products their looking for and the AI technology will help them find them faster.